

**Analyst:**  
Alastair Murray +618 8236 8866

**Authorisation:**  
Alan Young +618 8236 8888

**MUSTANG RESOURCES LTD**  
(MUS.ASX)

**RESEARCH NOTE**  
23 February 2017

## Mustang Resources - Update Report

After visiting Mustang's Mozambique Ruby & Graphite projects in November 2016 and the recent announcement of the first parcel of rubies being sent to the United States we have provided an update report to reflect the Company's ongoing progress. Mustang Resources Limited (MUS) is an ASX listed junior resource company focussed on mineral exploration in Mozambique. Mustang's flagship project is the Montepuez Ruby Project, where the Company is currently conducting extensive bulk sampling and exploration. The Montepuez Ruby Project neighbours the Gemfields PLC (LSE:GEM) ruby concessions, the largest ruby mine globally and has proven to be highly prospective. MUS's Initial bulk sampling has been successful, confirming gem quality rubies, including a number of significantly high carat stones.

We view Mustang as a high risk, high reward resource play and on the basis the current ruby bulk sampling program yields the results we expect, **we value MUS at \$0.16 per share, which is derived from a weighted discounted cash flow analysis of revenue derived from bulk sampling and its expected future ruby operations.**

**The ruby market is experiencing a decade of strong growth** – The global polished ruby market is estimated to be ~US\$2 billion per annum (2014) with the total coloured gemstone market (ruby, sapphire & emerald) estimated to be ~US\$5.9 per annum (2015). Most importantly, the coloured gemstone market grew by 13% in 2015, whilst diamonds decreased by 17%. The growth in the ruby market can be directly attributed to the likes of Gemfields, who are providing a consistent and reliable source of ethically mined gemstones, which has resulted in a 63% increase in the price of rubies over the past eight years.

**Successfully ramping up production** – As is common with any new mining operation there were teething issues which initially hampered production, namely excess clay and a restricted water source. Management promptly solved these issues via moving the plant and inexpensive plant enhancements, resulting in a ramp up to three times the previous rate. Enhanced throughput equates to greater ruby recoveries and improved economics of the project.

**Fast progression from gemstone explorer to producer** – Mustang have successfully transitioned to production within 12 months of acquiring the highly prospective Montepuez ruby project. The ability to go straight into large scale bulk sampling will allow early cashflows to be generated whereas most other mining jurisdictions require mining approvals which often take years to receive.

**First Parcel of Rubies sent to the US containing Special Stones** – The parcel of rubies and corundum that has been sent to the US totalled 6,221cts, which included seven special stones, weighing a total of ~95cts, including two rare 24ct high quality rubies. Large special stones can attract significant prices in excess of US\$100,000 per carat once cut and polished. Recent sales of large special stones between 8-30cts (cut & polished) have sold for between \$5 - \$30 million in the retail market. The special stones component represents very large potential upside to our valuation model on MUS.

**The Montepuez Ruby Project is located in a world-class ruby province**, adjacent to the world's largest ruby deposit, held by Gemfields PLC. Gemfields' Montepuez operations produce high quality rubies at an exceptionally high rate per ton. Gemfields have realised a total of US\$225 million from rubies auctioned throughout their bulk sampling phase (2012 – 2016), over which period its market capitalisation has grown to A\$406m.

**Aggressive drilling campaign to build inventory & JORC Resource in H22017 for both Ruby and Graphite projects.** Mustang is undertaking an aggressive auger drilling program on its rubies projects aimed at delineating a JORC ruby resource in 2HCY2017. The company will also drill out their Balama graphite project which is along strike from SYR, TON etc in the Balama graphite district of Mozambique aiming to produce a high grade JORC resource.

### RECOMMENDATION

**Buy**

### PRICE

**\$0.105**

### TARGET PRICE

**\$0.16**

### RISK

**High (Speculative)**

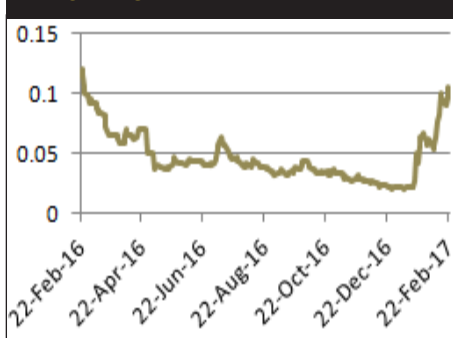
### BRIEF COMPANY DESCRIPTION

Mustang Resources Limited ("Mustang" or "the Company") is an emerging gemstone developer focused on the near-term development of the highly prospective Montepuez Ruby Project in Northern Mozambique. Neighbouring the world's largest ruby deposit discovered by Gemfields PLC (LSE:GEM), the Montepuez Ruby Project poses an opportunity for Mustang to become a reliable, consistent supplier of high-grade rubies. Mustang also has interest in Mozambique, the Balama Graphite Project, with a maiden resource due in CY'17. The projects present a significant potential value for which Mustang intends to realise.

### COMPANY DATA (23.02.2017)

ASX Code	MUS.ASX
Shares on Issue	~457.1m
Options on issue	~156.3m
Market Capitalisation (fully diluted)	~\$65.8m
12 Month High/Low	\$0.115/\$0.02
Ave Monthly Turnover	~182.2m
Cash – Post Placement	~\$2.4m

### 12 MONTH SHARE PRICE



### Baker Young Stockbrokers Limited

Level 6, 121 King William St, Adelaide, South Australia 5000  
T +61 8 8236 8888; 1800 061 765 (Toll free) F +61 8 8232 3877  
E [contact@bakeryoung.com.au](mailto:contact@bakeryoung.com.au) W [bakeryoung.com.au](http://bakeryoung.com.au)

(All dollars referred to in this report are in Australian dollars unless otherwise stated)

DISCLAIMER Issued by Baker Young Stockbrokers Limited ABN 92 006 690 320  
– Australian Financial Services Licence 246735 and should be read in conjunction  
with the disclosure/disclaimer in this report.

# Contents

<b>Company Overview .....</b>	<b>3</b>
Montepuez Ruby Project .....	3
Balama Graphite Project .....	3
<b>Investment View .....</b>	<b>5</b>
<b>The Montepuez Ruby Project .....</b>	<b>6</b>
Geology of the area .....	6
Progression of Project .....	6
The Alpha Ruby Deposit .....	7
Geology of the Alpha Deposit .....	8
Auger Drilling Program .....	8
<b>Relocated and Improved Plant .....</b>	<b>9</b>
Initial Issues .....	9
Solved Issues – Successfully Increasing Capacity .....	9
<b>Production to Date .....</b>	<b>10</b>
First Parcel of Rubies to USA .....	10
<b>Mustang’s Special Stones .....</b>	<b>11</b>
<b>Ruby Market .....</b>	<b>12</b>
Special Stones .....	12
General Ruby Market .....	12
<b>Balama Graphite Project .....</b>	<b>14</b>
Caula Project – (License 6678L) .....	15
Balama South Project (License 6636L & 4662L) .....	17
<b>Valuation Methodology .....</b>	<b>18</b>
Montepuez Ruby Project .....	18
Balama Graphite Project .....	19
<b>Risks.....</b>	<b>21</b>
<b>Disclaimer and Disclosure .....</b>	<b>21</b>

# Company Overview

## Montepuez Ruby Project

Mustang's flagship Montepuez Ruby is situated in Northern Mozambique within the Montepuez Complex. The recently discovered Montepuez Complex presents an inimitable geological occurrence which hosts widespread, high-grade ruby mineralisation that is incomparable to any other known ruby deposit.

Due to the Company's extensive in-country network and operational focus in Mozambique, Mustang was able to acquire rights to earn majority interests in three prospective ruby licences in early 2016 (Figure 1). The licenses lie along an established NW-SE ruby mineralisation trend which also bisects neighbouring licenses of the largest ruby miner globally, Gemfields (LSE:GEM).

Mustang has successfully transitioned from exploration to the delivery of their first parcel of rubies within 12 months of acquiring their highly prospective ruby licenses. Currently undertaking a bulk sampling program, Mustang are mining their initial primary target (Alpha Deposit), whilst undertaking an auger program to identify additional targets and define their maiden JORC resource.

The Montepuez region hosts widespread, high-grade ruby mineralisation, incomparable to any other known ruby deposit

Mustang has successfully transitioned from exploration to the delivery of their first parcel of rubies within 12 months

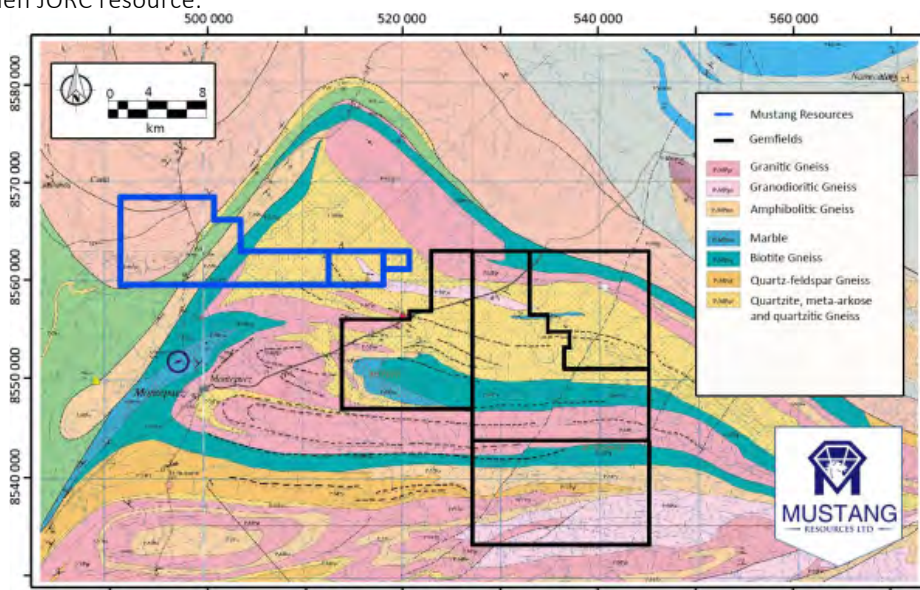


Figure 1 - Montepuez Region - Mozambique

## Balama Graphite Project

Mustang's Balama Graphite Project comprises of seven exploration licenses which total more than 70,000ha. Located along strike from world leader and giant on the ASX, Syrah Resources Ltd (SYR:ASX). Samples from the Balama Project have confirmed (up to 74m) high-grade intervals of up to 22% Total Graphitic Carbon (TGC). Initial field assessment showed the potential of large flake sizes, with sample analysis from 2015 revealing 57.9% Super Jumbo flakes exceeding +1180µm on license 4662L, the Balama South Project. The data suggests that the high grade intersections are more than likely extensions of neighbouring world-class graphite deposits.

Mustang's Balama Graphite Project comprises of seven exploration licenses which total more than 70,000ha.



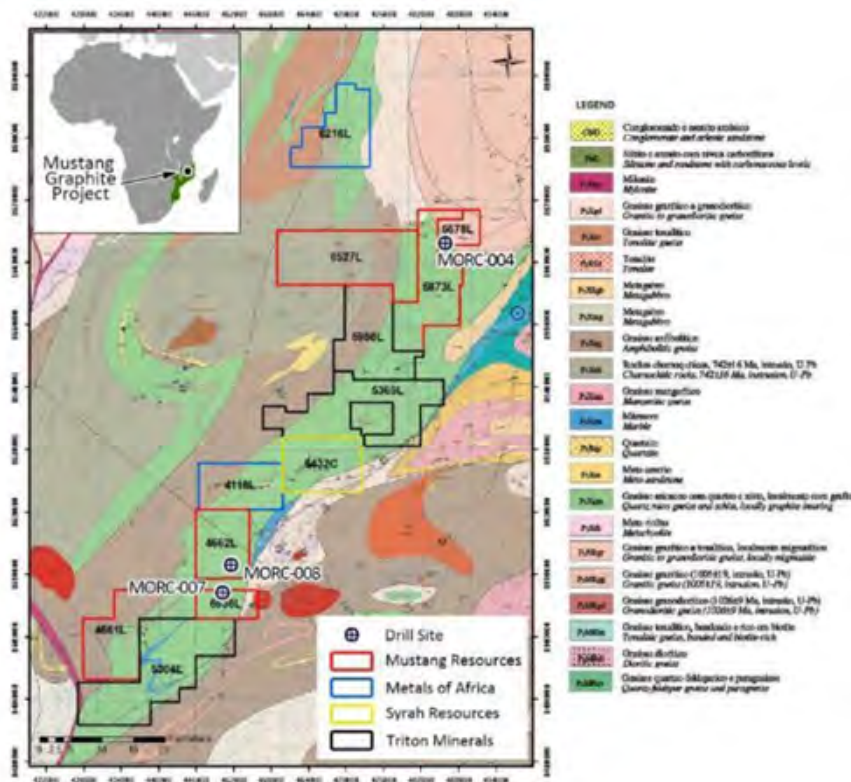
## Company Overview - Continued

The Caula Deposit (6678L; 80% interest) is Mustang's primary target, which was the focus of Mustang's recent diamond drilling campaign. The project hosts a steeply dipping hinge zone in the northern sector of 6678L, from which larger flake sizes have been recovered. Still to be confirmed by laboratory test-work, it is believed that the event that caused the hinge zone had a positive effect on flake size and graphite flake concentration & size.

The drilling is aimed at delineating a graphite JORC Resource at Balama, which is targeted for delivery during the second half of CY 2017.

The project hosts a steeply dipping hinge zone from which high grade and large flake size graphite has been recovered

Current drilling is aimed at delineating a graphite JORC Resource at Balama during 2H CY'17



## Investment View

We continue to hold the view that Mustang's Montepuez ruby project has the ability to be a real company making project. The company has now shown that gem quality rubies and in particular large special stones are present on its tenements. Mustang is executing its goal of developing a portfolio of world-class mining projects in the Republic of Mozambique that have the potential to generate significant cash flows with relatively limited capital outlay. We include value for the Balama graphite project on the back of recent drill holes, a recovering graphite market and the company's aim of posting a JORC resource on the project in the near/mid-term. We have not attributed any value to the Save River Diamonds project in this report.

The presence of gem quality rubies, the Montepuez ruby project's geology, artisanal workings and position near Gemfields, indicate the licences form part of a much larger geologically unique occurrence, which to date remains largely unexplored and under-developed.

Mr. Paul Allan, an experienced ruby and diamond geologist who managed Gemfields PLC exploration activities from 2012 to 2014 is leading field work and bulk sampling operations. The presence of gem quality rubies confirms Mr Allen's earlier conclusions and field assessments that the potential for significant ruby mineralisation across licences 4143L, 4258L and 5030L was high. Furthermore, that the lithology found at these licences is the same as that of the nearby world-class Gemfields deposit.

Mr. Allan noted that the source of the higher quality secondary rubies over the Gemfields licences remains to be discovered and that encouragingly the MUS licences occur along the same geological strike as the Gemfields ruby occurrence. We interpret this to mean that MUS has an excellent chance of increasing the ct/ton grade on its operations as Gemfields has done on its Mugloto project bulk sample where grades started off at 0.11ct/ton and ranged up to 5.64ct/ton with final grades said to be closer to 1ct to 2ct/ton<sup>1</sup>.

We maintain our view that from a Capex until first substantial revenues position there are not many mining projects in the world with the same short timeline, low upfront capex and low ongoing Opex that can yield the potentially high revenues that Management are confident the Montepuez project can achieve. This means that there is scope for some very strong revenues to be achieved off a very small Capex base if Mustang can successfully continue to ramp up operations and achieve Management's target levels of production and grade.

Now that Mustang have proven their tenements contain gem quality rubies the next milestone to be achieved is producing large enough quantities economically and achieving the desired price per carat. This combined with the direct sales of cut and polished special stones indicate the potential to generate revenues in the 10's of millions of dollars, ultimately yield and price per carat having the biggest influence on cashflows.

Taking into account dilution from the recent capital raise and on the basis that bulk sampling ramps up as expected and the company continues to find large special stones **we maintain our BUY recommendation and value Mustang at \$0.16 per share using a weighted DCF of bulk sampling/future mining operations.**

Mustang is now showing signs of being able to generate significant cash flows with relatively limited capital outlay.

Mustang has confirmed gem quality ruby mineralisation on its tenements

**We value Mustang at \$0.16 per share.**

1. SRK Consulting Report - Competent Persons Report on Montepuez Ruby Project

# The Montepuez Ruby Project

## Geology of the area

Ruby deposits form in a wide variety of geological environments, and include primary igneous or metamorphic deposits and anatectic-related deposits as well as in secondary alluvial or colluvial deposits.<sup>1</sup> Historically, most rubies were recovered from marble-hosted deposits (Burma) or secondary basalt-related deposits (Thailand). However, the recently discovered primary amphibolite-hosted deposits within the Mozambican Belt in East and Southern Africa, together with secondary deposits, are now considered to account for the largest portion of the worldwide ruby trade. In particular, the primary amphibolite-hosted and secondary ruby deposits currently being exploited by Montepuez Ruby Mining Lda (MRM) are estimated to account for 40% of the ruby trade.<sup>2</sup>

Interestingly, some of the secondary deposits found within the Montepuez region may be 'colluvial' deposits instead of traditional 'alluvial' deposits, which would explain the widespread distribution of rubies and difficulty in determining the deposits primary source. This theory is supported by occurrences within the Gemfields licenses, where significant secondary deposits are located directly above rich amphibolite primary deposits.

**Colluvium** = A general name for loose, unconsolidated sediments that have been deposited at the base of hillslopes by either rain-wash, sheet wash, slow continuous downslope creep, or a variable combination of these processes under the influence of gravity.

**Alluvium** - relatively homogenous sediments at the base of hillslopes, including basin fill. The large degree of sediment sorting indicates transport by water. The size of the particles would be limited to what the surface flow of water is capable of carrying in that environment.<sup>3</sup>

## Progression of the Project

### Identification of Alpha Deposit

Mustang undertook initial reconnaissance sampling in July 2016 in order to define their primary targets for the Bulk Sampling program. Utilising world renowned, ex Gemfields geologist Paul Allen in conjunction with local artisanal miners, Mustang were able to ascertain areas that were likely to host secondary ruby deposits. Simple auger drilling is used to determine the existence of gravels. Once potential ruby hosting gravels have been identified, multi-tonne samples are excavated in a trenching program for processing to determine the presence of rubies. Mustang identified the 'Alpha Deposit' as their first target for the expanded 'bulk sampling' program.

### Bulk Sampling Program

The bulk sampling programs (Figure 3) assess the viability of the target sites, which were identified in the trenching program. The program is structured in a block formation with a 45-ton excavator stripping depth of 1-14 metres depending on the sidewall overburden with a 3x3 metre step formation. The overburden is stripped and placed aside for later rehabilitation back into the pit once all gravel and/or amphibolite material has been excavated. The ruby enriched gravel and/or amphibolite material is relocated to the plant via articulated dump trucks.

Mozambican Rubies now account for the largest portion of the worldwide ruby trade

The secondary deposits found within the Montepuez region may be 'colluvial' deposits instead of traditional 'alluvial' deposits

Mustang identified the 'Alpha Deposit' as their first target for the expanded 'bulk sampling' program.

The bulk sampling programs (Figure 3) assess the viability of the target sites

1. Simonet et al., 2008

2. Application of the SAMREC code to the evaluation of ruby deposits – P G Allen

3. <http://www.geographer-miller.com/colluvium-vs-alluvium/>

## The Montepuez Project - Continued

### The Bulk Sampling Process

Mustang's management has a breadth of experience in the operation of gemstone mining operations. Utilising simple theories of gravity and density, Mustang have been able to implement a high capacity/high recovery processing plant for minimal capital outlay. Mustang have achieved comparable processing capacity to their neighbour, Gemfields, for approximately 1/10th of the cost.

Mustang have achieved comparable processing capacity as Gemfields, for approximately 1/10th of the cost.

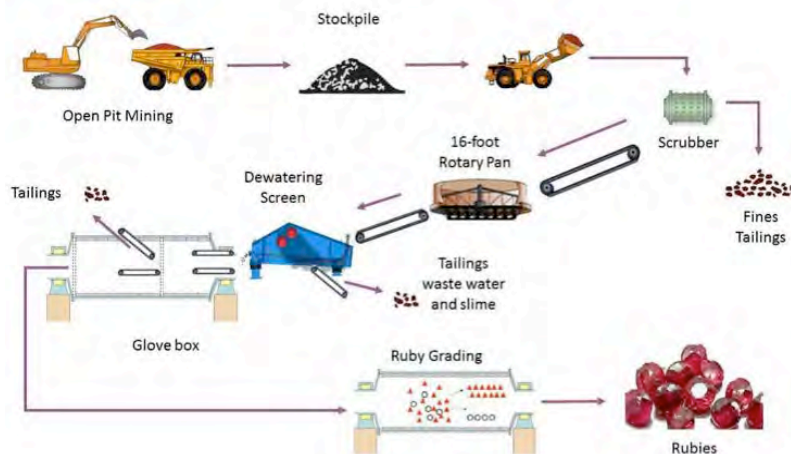


Figure 3 - The Bulk Sampling Process

### The Alpha Ruby Deposit

Located in the South Eastern corner of the license (figure 4), the Alpha Ruby Deposit was discovered through initial reconnaissance sampling in July 2016 and is the current focus of bulk sample mining operations. The first phase of the pit has reached bedrock at 9.2 metres with an average gravel package of 1.8 metres. The pit was then extended to the south-west where the gravel horizon was found at a depth of 14m (Figure 5).



The first phase of the pit has reached bedrock at 9.2 metres with an average gravel package of 1.8 metres

Figure 4 - Location of the Alpha Deposit

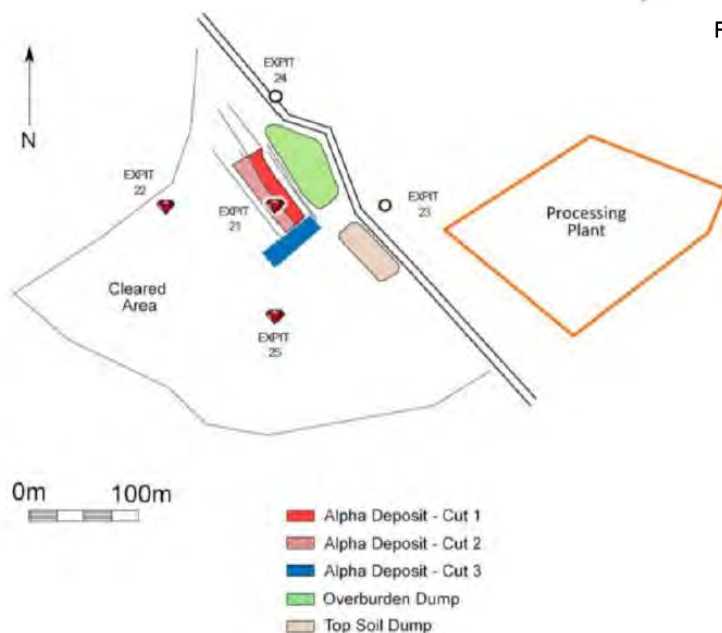


Figure 5 - The Alpha Deposit



## The Montepuez Project - Continued

### Geology of Alpha Deposit

The gravel horizon consists of poorly sorted, clast supported, quartz clasts ranging up to 15cm in size on average. Most are sub-rounded and fairly spherical. Approximately 10% are > 10cm in size while 75% are between 2 and 10cm (see Figure 6). As discussed above the gravel horizons are not typically alluvial in character and are more likely the result of colluvial weathering due to gravity.

The gravel-bearing horizon of the first cut of the Alpha Deposit has highly variable thickness, ranging from the tens of centimetres to over two metres. The base of the gravel varies substantially over a short distance and is generally parallel to the quart-biotite gneiss bedrock.

The gravel-bearing horizon of the first cut of the Alpha Deposit has highly variable thickness, ranging from the tens of centimetres to over two metres

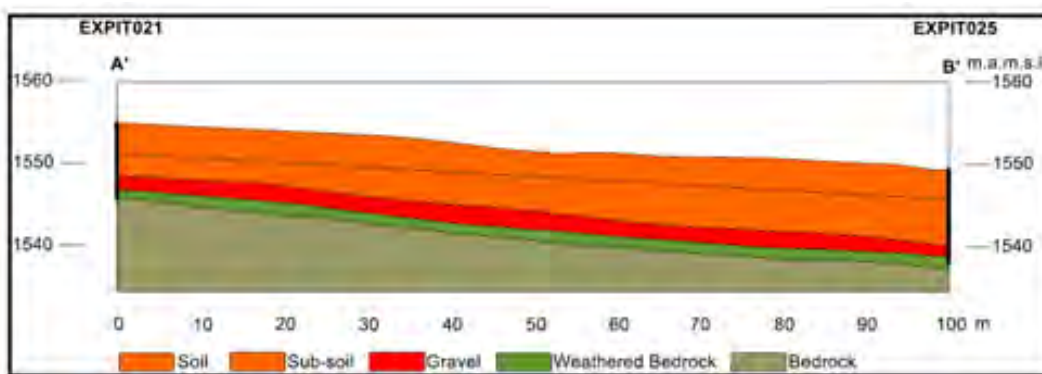


Figure 6 - Cross Cut of the Alpha Deposit

### Auger Drilling Program – Defining a Resource

An auger drilling campaign commenced in January 2017 to map the ruby-bearing ore across the project area and delineate an initial JORC Resource. The drilling has commenced at the Alpha deposit and will extend outwards. The purpose of this drilling campaign will be to map the extension of the Alpha deposit and thereafter to map all the gravel beds within all three of the Mustang license boundaries.

From initial geological investigations undertaken by Mustang and its independent geologists, the Company is confident that the Montepuez Ruby Project will host significant ruby-bearing gravels sufficient to support a long mine life.

An auger drilling campaign commenced in January 2017 to map the ruby-bearing ore across the project area and delineate an initial JORC Resource

#### Inferred JORC Resource

The auger drilling will enable 'the Competent Person' to estimate the volume of gravel-ore material and following the sale of a sample of rubies recovered from the deposit, allowing for the estimation of a JORC Compliant (Inferred) Resource.



# Relocated and Improved Plant

A number of challenges were encountered in ramping up the plant towards its full capacity resulting in a limitation of processing to 115m<sup>3</sup> ROM (average) per day (3,807m<sup>3</sup> total ROM/ 33 operational days), which was well short of our initial throughput expectations.

The Company have implemented a number of changes to optimise the processing plant which has resulted in progressive increases in daily throughput. This is critical to the viability of Mustang's operation as profitability is directly correlated to the number of tonnes processed.

## Initial Issues

### Dense Clay

A greater than anticipated amount of dense clay throughout the gravel ore resulted in difficulties whilst processing the gravels. The clay naturally clumps restricting the free separation of fine material that hosts rubies and also hindering the machinery causing greater downtime hours.

### Water Usage and Availability

Increased levels of water were required to combat the high levels of clay, which resulted in water capacity issues. Increased water requirements in conjunction with Northern Mozambique's long dry season from April to November 2016 restricted consistent water supply during the commissioning and ramp-up phase, consequently limiting processing capacity.

## Solved Issues – Successfully Increasing Capacity

In order to solve the water capacity issues, Mustang initiated a borehole drilling program, which resulted in a significant discovery of water bordering the Alpha Deposit. To capitalise on the significant water discovery the team relocated the plant to a site established within 400m of the deposit (figure 7). Additionally, moving the plant allows Mustang to benefit from reduced ore haulage distance and the introduction of a second shift at the plant, which significantly reduces mining costs.

With the water issue solved, new jets and stronger water pumps were installed on the scrubber to assist in breaking up the clay and to increase the effectiveness of the plant towards the targeted rotary pan processing capacity.

Commissioning of the relocated processing plant was completed early in the New Year, with the plant currently ramping up to the targeted rate of 525 tonnes per day. Encouragingly processing rates have been as high as 1000tpd. It is essential for Mustang to scale up effectively in-order to complete its 150,000 tonnes bulk sample as soon as possible, enabling grades, quality and commercial viability to be determined.

The Company has implemented a number of changes to optimise the processing plant

A greater than anticipated amount of dense clay throughout the gravel ore resulted in difficulties whilst processing the gravels.

To capitalise on the significant water discovery the team relocated the plant

The plant is currently ramping up to the targeted rate of 525tpd. Rates have been as high as 1000tpd



Figure 7 - Ariel photo of the relocated plant

## Production to Date

From the inception of the bulk sampling program to 20 January 2017, 15,585m<sup>3</sup> of ruby-bearing gravel (including the immediate material above and below the gravel contacts) has been mined from the Alpha deposit and stockpiled, of which 7,290.50m<sup>3</sup> (approximately 11,300.28 tonnes) has been processed through the plant resulting in the recovery of 1,638.76cts of high quality ruby.

Additionally, Mustang utilises a number of local prospecting teams to assist Paul Allen's geological team in its exploration program to accelerate the discovery and testing of new areas for potential auger drilling campaigns. Employing local knowledge has been a very successful strategy, allowing Mustang to cover significant ground, quickly for minimal exploration outlay.

To date, Mustang's prospecting team's work has resulted in the receipt of 13,314.76 carats of ruby and corundum, of which 5,406 carats were included in the 6,221 carat parcel dispatched to the USA (see below).

## First Parcel of Rubies to USA

Mustang was re-rated on the announcement of its first commercial batch of rubies being sent to US service providers and customers. Such service providers and customers include the highly regarded gemstone cutter Meg Berry and leading jewelers in California. The parcel of rubies and corundum totalled 6,221cts (figure 8), which included seven special stones (Figure 9) weighing a total of ~95cts, including two rare 24ct high quality rubies.

Mustang is intent on unlocking the maximum value of their stones. In order to do this, Mustang have engaged with experts, including an American gemologist and his team, to determine whether Mustang will only market its rubies in the rough on auctions, or whether to cut and polish a portion of its stones and supply the wholesalers & manufacturers directly.

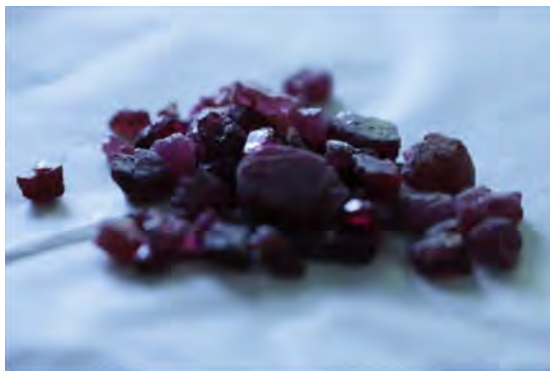


Figure 8 - Portion of the parcel of ruby & corundum (excl. special stones) dispatched to the USA.

The bulk sampling programs (Figure 3) assess the viability of the target sites

Mustang's prospecting team's work has resulted in the receipt of 13,314.76 carats of ruby and corundum

First parcel of rubies sent to the US totalled 6,221 cts, which included seven special stones weighing ~95cts, including two rare 24ct stones.

# Mustang's Special Stones

The parcel of seven special stones (Figure 9) weighing a total of ~95cts (including two rare 24ct high quality rubies) are to be cut, polished and sold individually to customers. Managing the whole process for special stones will unlock a dramatically higher value than following the Gemfields model of selling in the rough. Importantly, the seven special stones are of premium high quality and have been confirmed as suitable for cutting without heat treatment. Typical cutting yields for gem/facet quality ruby from Mozambique can range from 30% to 60% depending on several factors such as the number of inclusions in the stone & the colour saturation. One of the most important factors for achieving a high-yield, high-quality final product is the skill of the cutter which can materially influence the value of these high-end stones.

In-order to achieve the best cut, Mustang have engaged internationally-renowned gemstone cutter and polisher Meg Berry has started cutting the rubies sent from Montepuez to the US last month. This was the first commercial parcel of rubies dispatched by Mustang.

Once cut and polished, the stones will be certified at the GIA (Gemological Institute of America) laboratory in California ahead of their planned valuation and potential sale to leading wholesalers in March.

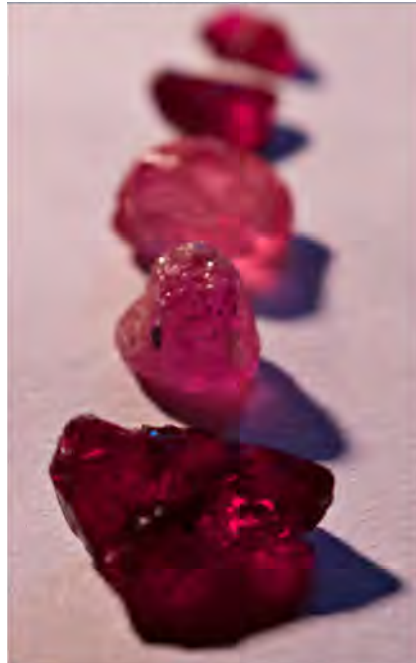
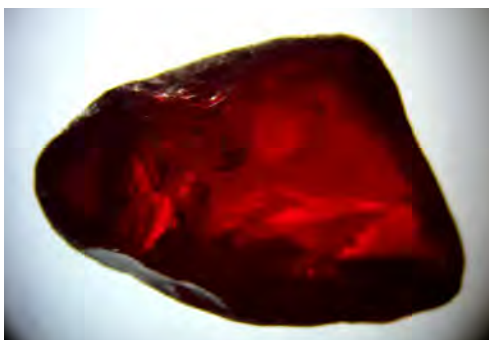


Figure 9 - First 5 Special stones recovered

## Meg Berry – Specialist Gemstone Cutter

Ms Berry is touted as one of the best in her field, with 38 years experience in the cutting of fine gemstones. Not only does Ms Berry unlock the highest potential and value from the each stones, her name simply adds value, as people desire a stone 'cut by Meg Berry'.



## Enhancing Value - Building the Story

Mustang plans on retaining a high level of control over their special stones in order to 'build a story' to enhance value. Building a story includes photos of when/where it was found, analysis of the stone, certificates of ethical standards and information on the gem cutter. These simple additions add depth to the stone, distinguishing it from others.

## Special Stone Prices

Current asking prices in the US for unenhanced (untreated) Mozambique rubies between 4.00 and 4.99cts is US\$18,425/ct (Lower Fine) to US\$42,000 (Upper Extra Fine). Due to their rarity, wholesale reference prices for unenhanced (cut) Mozambican rubies larger than 5ct are not yet available and are typically negotiated between buyer and seller and prices can increase exponentially as the rubies get larger (exceeding US\$100,000).

Mustang intend on unlocking a higher value by cutting and polishing their special stones.

The skill of the gem cutter, can dramatically affect the quality and subsequent value of the stone

Mustang have engaged internationally-renowned gemstone cutter and polisher Meg Berry

Ms Berry is touted as one of the best in her field, with 38 years experience in the cutting of fine gemstones.

Mustang plans on retaining a high level of control over their special stones in order to 'build a story' to enhance value

Cut and polished rubies larger than 5cts can exceed US\$100,000 per carat



# Ruby Market

## Special Stones

Over the past 18 months there have been significant ruby sales (table 1), highlighting the growing demand and market for rubies and especially high carat special stones.

Carat	Name	Sale Price	Date	Comment
10.05ct	Ratnaraj Ruby	US\$10,000,000	Nov 2016	Third highest price per carat for a ruby of US\$1,017,557
15.99ct	Jubilee Ruby	US\$14,165,000	April 2016	Most expensive coloured gemstone sold in the USA in history.
15.04ct	Crimson Flame Ruby	US\$18,382,385	Dec 2015	Sold by Christies in Hong Kong
25.59ct	Sunrise Ruby	US\$30,335,698	May 2015	Most expensive Cartier jewel ever auctioned.
8.62ct	Graff Ruby	US\$8,372,094	Nov 2014	Held the record for the highest US\$ per ct value for a brief period up to May 2015
32.08ct	Hope Ruby	US\$6,736,750	May 2012	
8.24ct	Van Cleef & Arpel's Ruby & Diamond Ring	US\$4,226,500	Dec 2011	Gift by Richard Burton to Elizabeth Taylor and was auctioned as part of her jewellery collection.

Table 1 - Recent Special Ruby Sales



Figure 10 - The 8.62ct Graff Ruby (Left) and the 25.50ct Sunrise Ruby (Right)

## General Ruby Market

India, China and the United States are the largest ruby, emerald and sapphire consumers globally with their total imports of wholesale and cut stones equating to approximately US\$3.6 billion between them. Interestingly, this figure has grown by over 280% from 2005 and does not show signs of slowing.

Global Mining Observer research states that the US coloured gemstone market has grown from an equivalent 2.6% of the diamond market in 2005 to 4.5% in 2014 and projects growth to continue to increase (figure 11). The strong growth in the global ruby market is directly correlated with the increase in reliable supply from the likes of Gemfields PLC and soon to be Mustang. The leading jewellers (Cartier etc) expressed their desire to include higher amounts of rubies throughout their range, but inconsistent and unreliable supply/sources posed too greater risk.

Gemfields annual report states that during 2015, global imports of ruby, emerald and sapphire gemstones breached US\$5.9 billion, which was a 13% increase on the previous year. Interestingly, in the corresponding period, global imports of diamonds decreased by a staggering 17%, from US \$84 billion in 2014 to US\$70 billion.

There have been significant ruby sales over the past 18 months.

India, China and the United States are the largest ruby, emerald and sapphire consumers globally, exceeding US\$3.6B

In 2015 coloured stone imports breached US\$5.9B, growing ~13%, whilst diamonds decreased by ~17%.

## Ruby Market - Continued

### US Coloured Gemstone Imports (US\$m) & Market Share vs. Diamonds

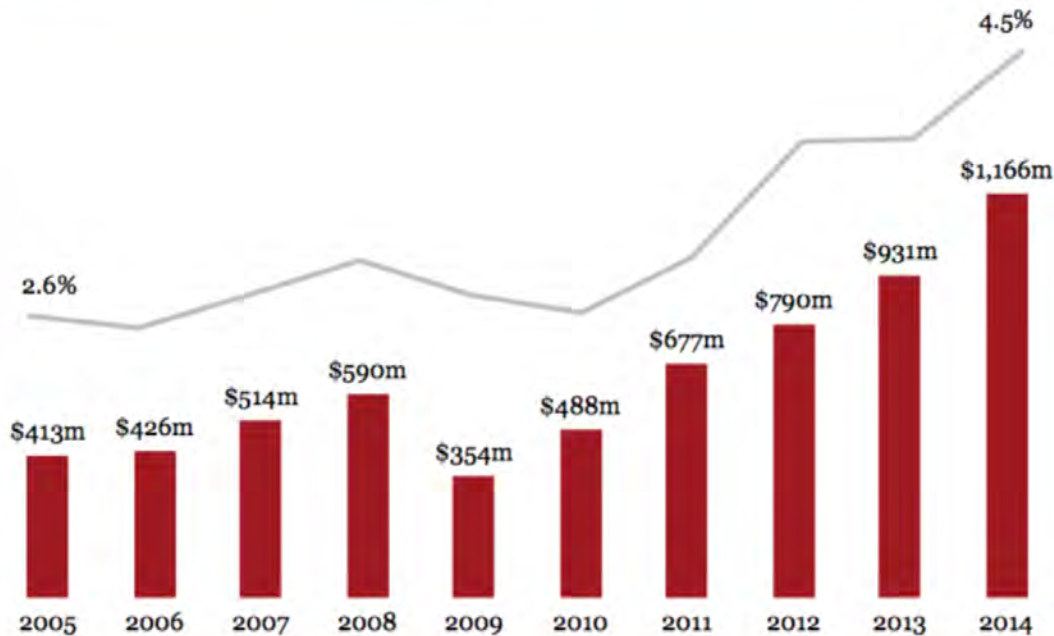


Figure 11 - US Gemstone Import Data

### Targeting the United States

Mustang's initial target market is the United States, which imports approximately US\$1.2 billion of cut/processed ruby, emerald and sapphire. Mustang have undertaken a number of reconnaissance trips to the US to engage with US retailers and wholesalers, who have indicated there is a substantial, unmet demand to ethically-mined, mine to market rubies. Mustang's announcement of its first parcel of rubies to the US is the significant milestone for the Company as it embarks on becoming a leading ruby supplier.

The United States has an unmet demand for ethically-mined, mine to market rubies

### Gemguide - Ruby Pricing GUide for Good to Extra Find Rubies - Oct 2016

Size	Lower Good	Upper Good	Lower Fine	Upper Fine	Lower Extra Fine	Upper Extra Fine
0.020 - 0.099	65- 90	95- 125	140- 280	315- 345	345- 440	440- 750
0.100 - 0.249	95- 155	165- 225	280- 345	375-440	440- 565	565- 815
0.250 - 0.499	150- 200	205- 260	300- 720	840- 1080	1080- 1800	1800- 3000
0.500 - 0.999	445- 660	900- 1140	1360- 1680	1800- 2400	2400- 3720	3720- 4500
1.000 - 1.999	595- 780	1170- 1620	1980- 2400	2640-3600	3600- 4800	6600- 8100
2.000 - 2.999	900- 1170	1740- 2280	3000- 4800	5400- 7200	7200- 10200	10750- 13200
3.000 - 3.999	1455- 2000	3190- 4375	5625- 6625	6750- 8200	10500- 13700	16850- 21000
4.000 - 4.999	1950- 2600	4065- 5525	7200- 9000	10500- 12900	14250- 19200	22600- 26200
5.000 - 7.999	2295- 4160	5785- 7410	9800- 12500	13500- 17900	19900- 25700	27625- 35900

<b>Color</b>	Orangey red, red, slightly purplish red, strongly purplish red.
<b>Clarity</b>	TYPE II - usually eye clean with some inclusions under magnification.
<b>Cut</b>	Native cuts usually seen; well-cut stones rarely available in fine qualities.
<b>Carat Weight</b>	Over 8 carats in finer qualities is rare, therefore prices are negotiable
<b>Hardness</b>	9.00
<b>Treatment</b>	Heat, flux healing, filling.
<b>Specific Gravity</b>	4.00
<b>Species</b>	Corundum

# Balama Graphite Project

The Graphite Project is located in Balama in Mozambique consist of 8 licenses and covers 100,000ha (1,000Sqkm) all underlain by locally graphite bearing schists (figure 12). Mustang's tenements surround the world leading graphite discoveries of Syrah Resources Ltd (ASX:SYR), Triton Resources Ltd (ASX:TON) and Battery Minerals Ltd (ASX:BAT) and are thought to be the extensions of these strikes.

An airborne electromagnetic (EM) survey was completed over the licenses, throughout 2015 yielding well-defined EM anomalies. These anomalies were prioritised and warranted follow-up exploration. The Company undertook a Reverse Circulation (RC) drilling program (789m) throughout three of their licenses (license 6678L, 5873L & 4662L) to determine the existence of the potential Syrah strike extension. The program returned exceptional laboratory results, confirming wide, high grade intervals of up to 22% Total Graphitic Carbon (TGC). Field assessment of the graphite grade has highlighted a number of visually high grade, large-flake size zones of interest, with Mustang currently awaiting confirmation from pending laboratory results.

## Diamond Drilling

Diamond drilling is required to precisely grade graphite to assess its suitability for commercial applications. Total graphite content, in-situ flake quantities & sizes and liberation characteristics are the critical factors when assessing the merits of a graphite deposit.

The encouraging results from the RC drilling campaign formed the basis of the diamond drilling targets. Mustang twinned the most promising RC holes with the goal of producing its maiden JORC Resource on the Caula Project (License 6678L) during 2017.

## Awaiting Laboratory Analysis

The most recent announcement by the Company states that the graphite samples were in transit to the accredited laboratory where processing to confirm the total graphitic content, flake-size distribution and metallurgical properties will be completed. We look forward to the update which details the laboratory analysis.

The Balama Graphite project consists of 8 licenses, covering 100,000ha

The program returned exceptional laboratory results, confirming wide, high grade intervals of up to 22% Total Graphitic Carbon (TGC)

Mustang twinned the most promising RC holes with the goal of producing its maiden JORC Resource

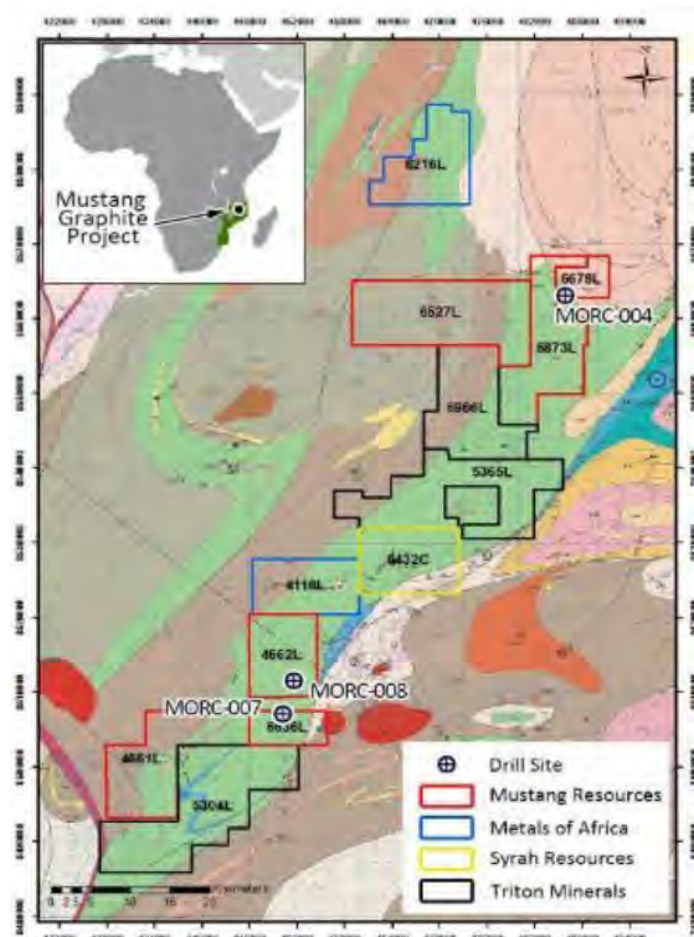


Figure 12 - The Balama Graphite Region



# Balama Graphite Project

## - Caula Project - (License 6678L)

Mustang was initially attracted to the Caula Project due to its interesting geological structure. The project hosts a steeply dipping hinge zone (figure 14) in the northern sector of 6678L, from which larger flake sizes have been recovered. Although it is still to be confirmed by laboratory test-work, it is believed that the event that caused the hinge zone had a positive effect on flake size and graphite flake concentration & size.

Five diamond drill holes have been extracted from the Caula Project on License 6678L, all close to a tight close anticline hinge that was identified by the SkyTEM data (table 2).

The recent diamond holes drilled have intersected significant intervals of graphite including:

Drill Hole	Intersect
MODD001	45m graphitic-zone along trajectory between 9m a 54m
MODD002	Graphite mineralisation between 19m and 47m along the drill trajectory
MODD003	Graphite mineralisation between 81m and 158m along the drill trajectory
MODD004	Graphite mineralisation between 15m and 49m and between 57m and 96m along the drill trajectory
MODD005	Graphite mineralisation between 14m and 20m; between 24m and 32m and between 44m and 100m along the drill trajectory

Table 2 - Summary of diamond drill holes

### Total Graphite Carbon (TGC)

RC samples from 2015 showed that drill hole MORC004 on license 6678L has an average TGC of 11.99% (3% TGC cut-off) within a 67m mineralised graphitic mineralisation zone. 23 samples returned compelling results, returning above 15% TGC (table 2).

The license hosts shallow graphite mineralisation with high grades close to the surface, which include 8.16% TGC a 1m from surface, 17.4% TGC at 11.6m from surface and 18.6% TGC at 35m. The highest TGC value recorded for this hole is 22% TGC at 45m below surface.

Five diamond drill holes have been extracted from the Caula Project on License 6678

The license hosts shallow graphite mineralisation with high grades close to the surface



Figure 13 - Diamond Drill Cores

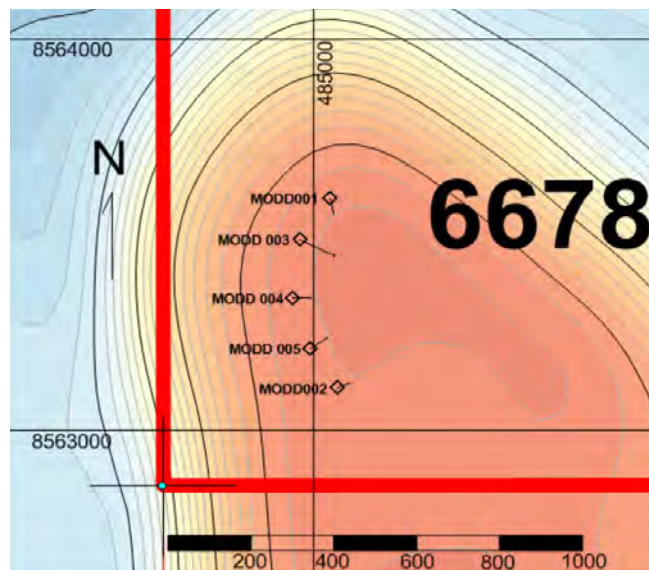


Figure 14 - Diamond drillholes - Hinge Zone - 6678L



## Caula Project - (License 6678L) - Continued

### Key Data from MORC-004

Drill Name	Coordinates – Zone 37		Concession Number
	Easting	Northing	
MORC-004	484939	8563344	6678L
Highest TGC (47m) – <b>22.00%</b>		Avg TGC Mineralised Zones – <b>10.69%</b>	
Mineralised Zones	Down-hole Interval	Average TGC	Highest TGC%
4m – 7m	3m	5.51%	8.16%
8m – 17m	9m	6.05%	17.40%
22m – 78m	56m	12.40%	22.00%
87m – 93m	6m	11.40%	18.80%

Table 3 - Summary of MORC-004

The intercepts presented in Table 3 are demonstrated in figure 15 below

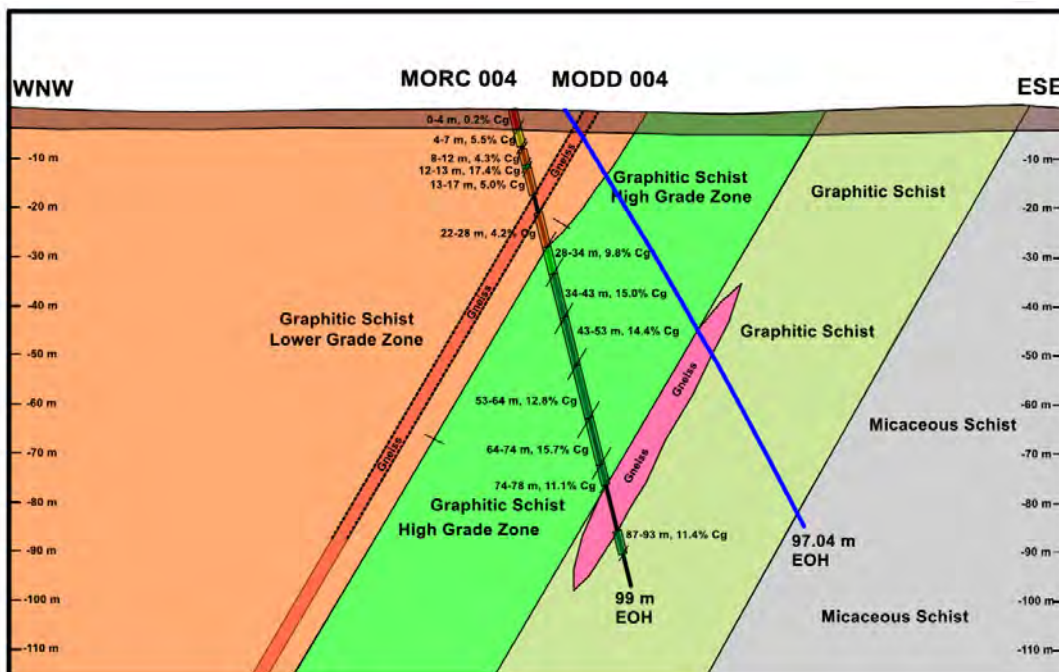


Figure 15 - MORC 004 & MODD 004 cross-section



Figure 16 - 6678L - Site Visit

## Balama Graphite Project

### - Balama South Project (License 6636L)

Balama South Project has one diamond drill hole (MODD007), which twinned RC hole MORC007. The RC sample revealed an average of 7.47% TGC within a 26m graphitic mineralisation zone. The graphitic mineralisation is shallow with high grades close to the surface, which includes a peak TGC of 18.8% at 63m.

RC samples from 6636L revealed an average of 7.47% TGC within a 26m graphitic mineralisation zone

Drill Name	Coordinates – Zone 37		Concession Number
	Easting	Northing	
MORC-007	452240	8505362	6636L
Highest TGC (47m) – <b>15.70%</b>		Avg TGC Mineralised Zones – 7.47%	
Mineralised Zones	Down-hole Interval	Average TGC	Highest TGC%
0m – 20m	20m	8.42%	15.70%
21m – 30m	9m	7.15%	12.60%
35m – 42m	7m	4.73%	6.97%

## Balama South Project (License 4662L)

Balama South Project has one diamond drill hole (MODD008), which twinned RC hole MORC008. The RC sample revealed an average of 7.02% TGC within a 74m graphitic mineralisation zone. The graphitic mineralisation is shallow with high grades close to the surface, which includes 10% TGC at 4m from surface, 16.5% TGC at 29m from surface, 18.2%TGC at 61m and the highest TGC value recorded for this hole being 18.8% TGC at 63m below surface.

RC samples from 4662L revealed an average of 7.02% TGC within a 74m graphitic mineralisation zone

Drill Name	Coordinates – Zone 37		Concession Number
	Easting	Northing	
MORC-008	451450	8511181	4662L
Highest TGC (47m) – <b>18.80%</b>		Avg TGC Mineralised Zones – 7.02%	
Mineralised Zones	Down-hole Interval	Average TGC	Highest TGC%
0m – 74m	74m	7.02%	18.80%



# Valuation Methodology

## Montepeuz Ruby Project

The estimation of ruby (alluvial & primary) resources and reserves can be problematic due to the variable distribution of the rubies within not only their primary source but also the gravel host. Whilst Mustang does not currently have a JORC compliant resource estimation they are conducting an extensive auger drilling program to achieve a JORC resource in the future. Using what we have learned from Mustang's bulk sampling to date and what Gemfields is achieving on its secondary ruby deposits we have determined the basic parameters that could exist assuming Mustang tenements are of a similar nature. We continue to discount these parameters due to the early stage of Mustangs project and uncertainty around the actual realised price per carat (rough and cut & polished).

For Gemfields the average gem quality of the secondary rubies is typically much higher than those contained within the primary amphibolites with secondary mineralisation grades: 7 - 22ct/ton , however we have assumed a discounted grade of 0.4ct/ton.

According to Gemfields' recent sales the actual average price received is US\$19/ct (ranging from US\$6/ct for primary zone, low quality rubies & corundum and up to US\$600/ct for high quality alluvials). However Mustang have focussed on the alluvial and therefore we have looked at three different prices of US\$317ct, US\$400/ct & US\$500/ct.

As MUS is targeting gem quality alluvials and selling direct we estimate that 85% of their stones total gathered stones will be sold as med-high quality rubies with specials being sold direct after cut and polishing thus achieving a much higher price per carat.

The table below shows our preliminary modelling with assumptions also detailed in the table.

**Table 1: Simple Revenue Model for 1st year of bulk sampling**

Simple Revenue Model Breakdown for Bulk Sampling Only - MUS targeting higher value alluvial rubies			
Item	2 Rotary Pans	2 pans - 2 shifts	Comments
tonnes per day into the plant	750	1,500	
tonnes per day into the Rotary Pan	600	1,200	
days per month (inc maintenance)	25	25	shut down etc
carats/tonne	0.4	0.4	
Total tonnes mined pa	225,000	450,000	tpa
Ave Opex per tonne	15	9.0	per GEM
Estimated mining costs pa	\$3,375,000.00	\$4,050,000.00	MUS 100%
<b>Gemstones Recovered</b>			
carats per day	240	480	
carats per month	6,000	12,000	
carats per 6 months	36,000	72,000	
carats per year	72,000	144,000	

Rubies to be sold direct in parcels w/o special stones	2 Rotary Pans	2 pans - 2 shifts	Special Stones	Comments
All gem quality, top 85% sold direct	85%	85%	100% Sold Direct	a
Actual amount of rubies auctioned pa - carats	61,200	122,400	200	b
Low Value per ct	\$317	\$317	\$10,000	c
Mid value per ct	\$400	\$400	\$20,000	c
High value per ct	\$500	\$500	\$100,000	c
low value	\$19,400,400	\$38,800,800	\$2,000,000	
Med value	\$24,480,000	\$48,960,000	\$4,000,000	
High value	\$30,600,000	\$61,200,000	\$20,000,000	

## Valuation Methodology - Continued

Artisanal Mining Operations	Per Qtr	Per 6 Months	Per annum	Comments
Carats mined for MUS	13,000	26,000	52,000	
Average estimated price per carat	\$30	\$30	\$30	d
Total Artisanal Revenues	\$390,000	\$780,000	\$1,560,000	
Estimated cost of artisanal miners ~15% of revenues	\$58,500	\$117,000	\$234,000	e

Annual Cashflow - 100% of mining operations	Per Annum	Including Special cut stones and Artisanals
Actual amount of rubies sold	122,400	
low value of \$317/ct	\$38,800,800	\$42,360,800
Med value \$400/ct	\$48,960,000	\$54,520,000
High value of \$500/ct	\$61,200,000	\$82,760,000

Other Assumptions			
Tax	32%	32%	
Royalties	6%	6%	
percentage ownership to MUS	60%	60%	60% on 4143
a) 85% sold as rough gem quality, 100% of special stones cut and polished			
b) 95 cts of special stones collected over 3 months, 400 cts pa, 50% yield after cutting (mid point of typical yield range)			
c) estimated low-mid-high range for price per carat for cut and polished large special stones - recent wholesale US price achieved \$100,000 ct			
d) ave price per carat for rubies mined by artisanal miners			
e) estimated cost of artisanal miners			

## Balama Graphite Project

To determine a fair valuation for the Balama graphite project we have implemented a peer group comparison valuation methodology. We have equated the value per ton of resource of comparable pre-production ASX listed graphite companies in order to determine a group average. Utilising the group average we have implied a value for the Balama graphite project and then discounted it to account for the early level of project development and project interest.

PEER COMPARISON	Mustang Resources	Syrah Resources	Battery Minerals		Triton Minerals		Black Rock Resources	Graphex Mining		Volt Resources	Group Average
Company											
Project	Balama	Balama	Balama	Montepuez	Nicanda	Ancuabe	Mahenge	Shimba	Chilalo	Namangale	
Country	Mozambique	Mozambique	Mozambique	Mozambique	Mozambique	Mozambique	Tanzania	Tanzania	Tanzania		
ASX Code	MUS.ASX	SYR.ASX		BAT.ASX		TON.ASX	BKT.ASX		GPX.ASX	VRC.ASX	
Fully Diluted Market Cap (\$AUD m)	62.75	881.01		47.67		47.99	55.90		29.90	55.90	
Resource											
Measured (Mt / %)	-	75.0 / 11.00%	-	-	-	-	21.2 / 8.60%	-	-	20 / 5.30%	
Indicated (Mt / %)	-	186.0 / 11.00%	35.7 / 8.20%	27.6 / 10.40%	369 / 11.30%	-	81.1 / 7.80%	5.1 / 11.90%	5.2 / 11.90%	155 / 5.00%	
Inferred (Mt / %)	Target 29.8 / 9.70%	<sup>(1)</sup> 930.0 / 11.00%	31.5 / 6.80%	34.1 / 10.2%	1,062 / 11.10%	14.9 / 5.40%	100.7 / 7.70%	20 / 6.00%	48.3 / 4.90%	286 / 4.90%	
Cut-off grade (%)	-	3.00%	2.50%	6.00%	9.00%	-	~2.00%	6.00%	5.60%	3.00 - 3.50%	
Flake size >300 microns (%)	-	9.00%	21.80%	8.00%	<sup>(2)</sup> 23.00%	72.60%	17.40%	-	-	-	
Valuation											Ave \$/t in ground
Contained TGC (Mt) on inferred basis	2.90	102.30	2.14	3.48	117.88	0.80	7.75	1.20	2.37	14.01	
Mkt. Cap (diluted) / Tonne (TGC) i.e. \$/t in-ground inferred resource	21.66	8.61	8.48		0.40		7.21	8.38		3.99	\$6.18

\*according to 2015 initial drill holes and sampling

<sup>(1)</sup> Syrah Resources Annual Report 2015, for the 6 months ended 31 December 2015 (Pg 18)

<sup>(2)</sup> "...23% of the graphite samples are very large flake which are 212µm or larger..." Triton Minerals Annual Report 2015 (Pg 7)

<sup>(3)</sup> prices as of 22/02/2017

Implied Value of MUS Graphite using group ave of value /ton resource	\$17,904,626
Applied 50% discount as JORC resource drilling is underway	\$8,952,313
MUS earning 60-95% of the graphite projects (use ave 75%)	\$6,714,235

## Valuation Methodology - Continued

We have combined the two valuation methodologies for the Montepuez ruby project and the Balama graphite project to determine our valuation.

**Montepuez Ruby Project** - Using the above net to MUS revenue range (low, mid & high), estimated expenses and a 15% WACC we constructed several DCF scenarios for MUS's net (56-60%) holding in the Montepuez Project assuming progression to full mining after successful bulk sampling.

**Balama Graphite Project** - Using the above peer comparison to determine an implied value per ton of resource and we then discounted to account for early level of project development.

We arrive at an average weighted DCF valuation – our \$0.16 per MUS share target price.

MUS DCF Scenarios	NPV / Share	Market Cap at Implied NPV/Share (Fully Diluted, AUD)	Weighting	Ave Weighted DCF Target Price
10 Years Operations (US\$300/ct est - see above)	\$0.097	\$60,091,375	35%	\$0.034
10 Years Operations (US\$400/ct est - see above)	\$0.137	\$85,050,426	35%	\$0.048
10 Years Operations (US\$500/ct est - see above)	\$0.218	\$135,261,610	30%	\$0.065
Balama Graphite - peer group value 30Mt - MUS earning 60-95% of the graphite projects (use ave 75%)	\$0.011	\$6,714,235	100%	\$0.011
Average Weighted Target Price				\$0.16



# Risks

## Exploration

The tenements are at various stages of exploration, and it should be understood that mineral exploration and development are high-risk undertakings. There can be no assurance that exploration of the tenements, will result in the discovery of an economic ore deposit. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited.

## Operations

The operations of the Company may be affected by various factors, including failure to locate or identify mineral deposits, failure to achieve predicted grades in exploration and mining, operational and technical difficulties encountered in mining, difficulties in commissioning and operating plant and equipment, mechanical failure or plant breakdown, unanticipated metallurgical problems which may affect extraction costs, adverse weather conditions, industrial and environmental accidents, industrial disputes and unexpected shortages or increases in the costs of consumables, spare parts, plant and equipment.

## Joint Venture Risk

The Company is subject to the risk that changes in the status of any of the company's joint ventures (including changes caused by financial failure or default by a participant in the joint venture) may adversely affect the operations and performance of the Company.

## Environmental

The operations and proposed activities of the Company are subject to applicable laws and regulation of the countries in which the Company's projects are located concerning the environment. As with most exploration projects and mining operations, the Company's activities are expected to have an impact on the environment, particularly if advanced exploration or mine development proceeds. It is the Company's intention to conduct its activities to the highest standard of environmental obligation, including compliance with all environmental laws.

## Title and access

Title to the Tenements and the Company's interest in them will be subject to renewal or grant at the discretion of the relevant regulatory authorities. Furthermore, mining tenements and operations are generally subject to specific legislative conditions and governmental edicts from time to time. If for any reason such conditions are unable to be met for whatever reason with respect to the Tenements, this could affect the good standing of the Tenements or restrict their ability to be renewed. Loss of any interest in the Tenements in this way could result in a loss to the Company through the loss of opportunity to discover or develop mineral resources on the Tenements.

## Commodity price volatility and exchange rate

If the Company achieves success leading to mineral production, the revenue it will derive through the sale of commodities exposes the potential income of the Company to commodity price and exchange rate risks. Commodity prices fluctuate and are affected by many factors beyond the control of the Company. Such factors include supply and demand fluctuations for precious and base metals, technological advancements, forward selling activities and other macro-economic factors.

# Disclaimer and Disclosure

## Important Disclaimer:

This document is a private communication to clients and is not intended for public circulation or for the use of any third party, without the prior approval of Baker Young Stockbrokers Limited. In the USA and the UK this research is only for institutional investors. It is not for release, publication or distribution in whole or in part to any persons in the specified countries.

This is general investment advice only and does not constitute personal advice to any person. Because this document has been prepared without consideration of any specific client's financial situation, particular needs and investment objectives ('relevant personal circumstances'), the investment adviser who has provided you with this report should be made aware of your relevant personal circumstances and consulted before any investment decision is made on the basis of this document.

While this document is based on information from sources which are considered reliable, Baker Young Stockbrokers Limited has not verified independently the information contained in the document and Baker Young Stockbrokers Limited and its directors, employees and consultants do not represent, warrant or guarantee, expressly or impliedly, that the information contained in this document is complete or accurate. Nor does Baker Young Stockbrokers Limited accept any responsibility for updating any advice, views opinions, or recommendations contained in this document or for correcting any error or omission which may become apparent after the document has been issued. Except insofar as liability under any statute cannot be excluded, Baker Young Stockbrokers Limited and its directors, employees and consultants do not accept any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission in this document or for any resulting loss or damage (whether direct, indirect, consequential or otherwise) suffered by the recipient of this document or any other person.

## Disclosure of interest:

Baker Young Stockbrokers Limited, its employees, consultants and its associates within the meaning of Chapter 7 of the Corporations Law may receive commissions, underwriting and management fees from transactions involving securities referred to in this document (which its representatives may directly share) and may from time to time hold interests in the securities referred to in this document.

**DISCLOSURE:** Baker Young Stockbrokers has participated in all previous capital raisings for MUS and received a fee for its participation. Baker Young is retained to provide Capital Market and Investor Relations advisory services to MUS on a non-exclusive basis.

**ANALYST CERTIFICATION:** Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: all of the views expressed accurately reflect his or her personal views about those securities or issuers and were prepared in an independent manner.