

**19 MARCH 2012**

**ASX CODE: KAS**

**OUR PRIME COMMODITY IS TIN.**

**ABOUT KASBAH**

**KASBAH RESOURCES IS AN AUSTRALIAN LISTED MINERAL EXPLORATION AND DEVELOPMENT COMPANY ADVANCING THE ACHMMACH TIN PROJECT TOWARDS PRODUCTION.**

**PROJECTS**

**ACHMMACH TIN PROJECT  
BOU EL JAJ TIN PROJECT**

**LME TIN PRICE (16/03/12)**

**US\$23,800/T  
(CASH BUYER)**

**BOARD & MANAGEMENT**

**MIKE SPRATT  
NON-EXECUTIVE CHAIRMAN**

**WAYNE BRAMWELL  
MANAGING DIRECTOR**

**ROD MARSTON  
NON-EXECUTIVE DIRECTOR**

**ROB WEINBERG  
NON-EXECUTIVE DIRECTOR**

**GARY DAVISON  
NON-EXECUTIVE DIRECTOR**

**IAN MCCUBBING  
NON-EXECUTIVE DIRECTOR**

**TREVOR O'CONNOR  
CFO / COMPANY SECRETARY**

**MIKE KITNEY  
CHIEF OPERATING OFFICER**

**CHRIS BOLGER  
GM EXPLORATION & RESOURCE  
DEVELOPMENT**

**WWW.KASBAHRESOURCES.COM**

## **ACHMMACH RESOURCE UPGRADE DELIVERS 150% INCREASE IN CONTAINED TIN**



### **HIGHLIGHTS**

- New Mineral Resource estimate for the Achmmach Tin Project delivers Indicated and Inferred resources of **14.6 million tonnes @ 0.9% tin for 135,000 tonnes of contained tin**
- Significant increase in all key resource metrics from the 2010 estimate including:
  - **150%** increase in contained tin
  - **141%** increase in indicated resource tonnage
  - **109%** increase in total resource tonnage
  - **94%** increase in inferred tonnage
  - **12%** increase in resource grade
- Meknes Trend defined over a strike length in excess of 1.5 km and remains open to west, east and at depth
- Significant potential to further enhance project economics by further drilling of Meknes Trend and parallel tin lodes

**Indicated and Inferred Resources of 14.6 million tonnes @ 0.9% Sn  
For 135,000 tonnes of contained tin**

**OVERVIEW**

Kasbah Resources Limited (Kasbah or the Company) (ASX: KAS) is pleased to announce an upgraded Mineral Resource estimate for the Company's Achmmach Tin Project in Morocco that has delivered a 150% increase in contained tin (for 135,000 tonnes of contained tin).

The Mineral Resource containing cassiterite (tin oxide) mineralisation at the Company's Achmmach Tin Project has been estimated utilising new drilling data obtained since the August 2010 estimate (**refer Appendix A**).

The mineralised zones formerly referred to and reported as Fez, Meknes, Marrakech, Gap and Eastern have now been recognised by Kasbah geologists as being part of a larger, continuous mineralised system now referred to as the "**Meknes Trend**" (**refer Figure 1**). The tin mineralisation occurs in envelopes of tourmaline alteration within folded meta-sediments and the tin is present as cassiterite in quartz-cassiterite veinlets within these envelopes.

Previously, the Eastern Zone was separated from the other mineralised bodies due to a lack of data within the centre of the Meknes Trend. The latest drilling has bridged this gap and the mineralisation has now been drill tested and is continuous over a strike length exceeding 1.5 km (**refer Figure 2**). The Meknes Trend remains open along strike to the west, the east and at depth.

**Table 1** summarises the new Achmmach Mineral Resource estimate of **14.6 million tonnes at 0.9% Sn** (for 135,000 tonnes of contained tin) and includes Indicated and Inferred Resources. The estimate is reported in accordance with the JORC Code (2004 edition).

**Table 1**  
**Mineral Resources Achmmach Tin Project (Meknes Trend) 16 March 2012**  
**(0.5% Sn cut-off)**

Category	Tonnes (Mt)	% Tin (Sn)	Contained Sn (K Tonnes)
Indicated	5.3	0.8	42
Inferred	9.3	1.0	93
<b>Total</b>	<b>14.6</b>	<b>0.9</b>	<b>135</b>

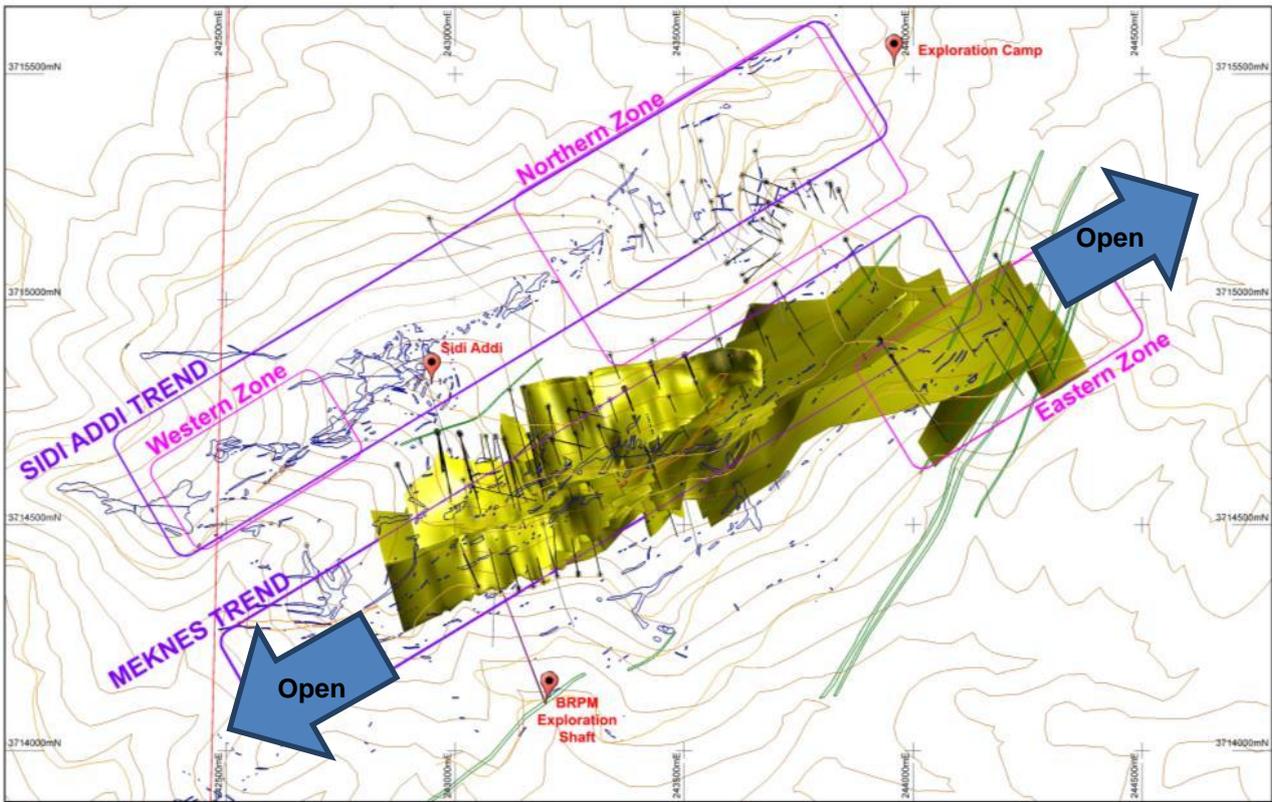


Figure 1 – Plan View of 2012 Achmmach Meknes Trend Mineralisation Wireframes

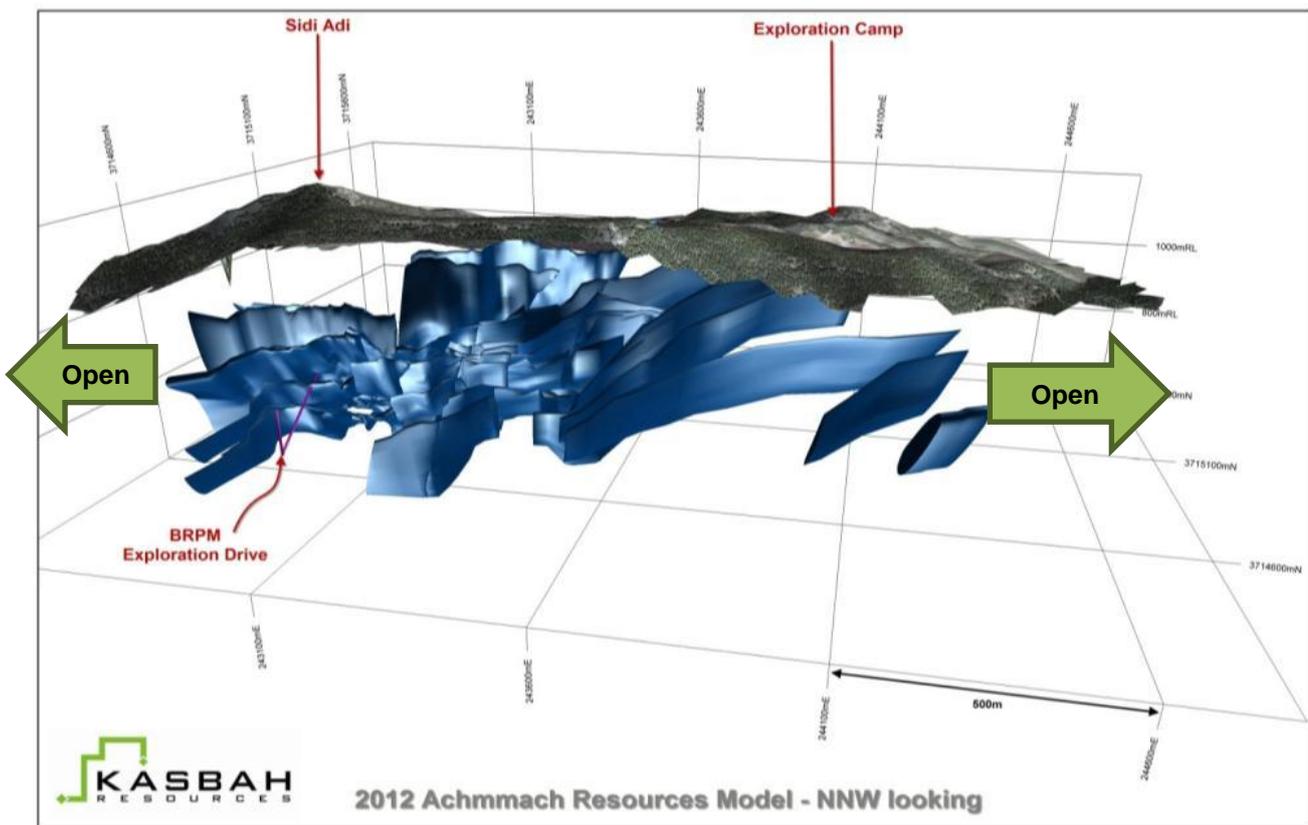


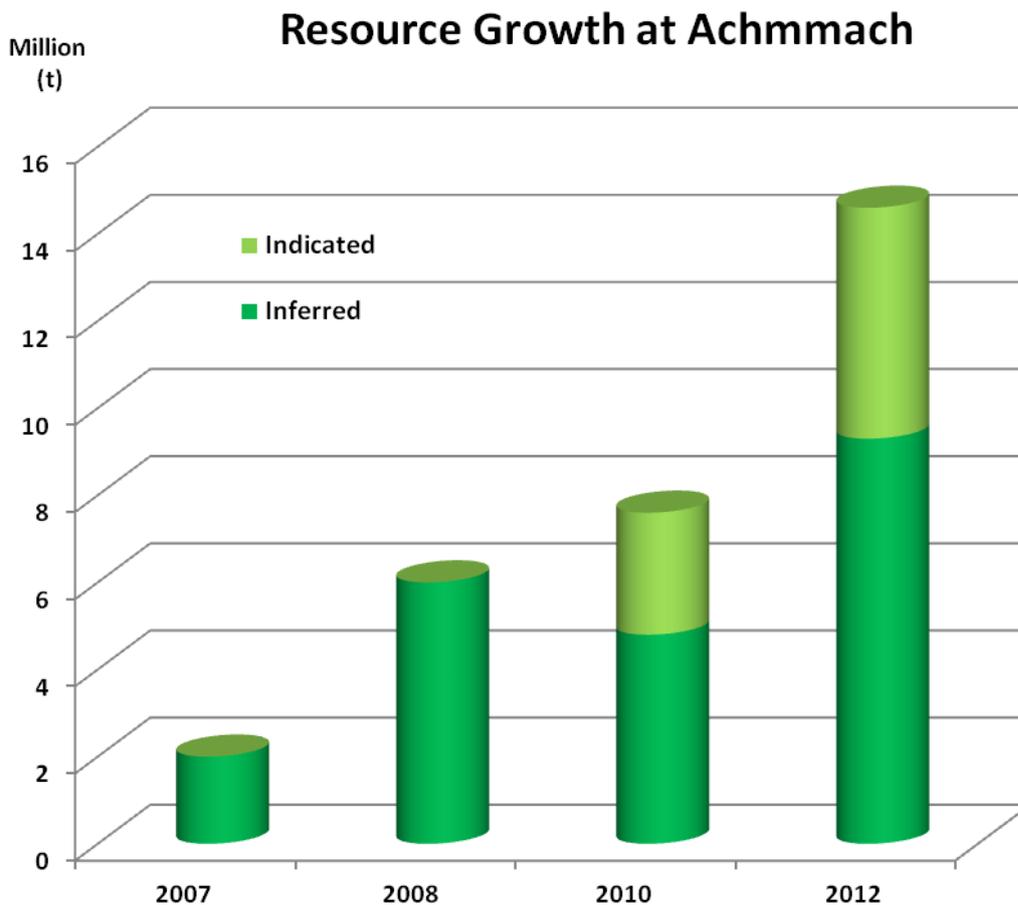
Figure 2 - 2012 Achmmach Meknes Trend Resource Model (and surface topography)

The March 2012 Mineral Resource estimate has generated significant increases in all the key resource metrics from the previously reported Achmmach Mineral Resource of 16 August 2010 (both estimates were undertaken using a 0.5 % tin cut off).

In comparison to the 2010 Mineral Resource estimate that delivered 54,000 tonnes of contained tin, the March 2012 Mineral Resource estimate represents a:

- **150%** increase in contained tin;
- **141%** increase in indicated resource tonnage;
- **109%** increase in total resource tonnage;
- **94%** increase in Inferred tonnage; and
- **12%** increase in resource grade.

As a result of the large amount of extensional and infill drilling Kasbah has been able to significantly increase the confidence of the Resource estimate (refer Figure 3).



**Figure 3 - Resource Growth at Achmmach since Initial Public Offering (IPO)**

Kasbah's Managing Director Wayne Bramwell said:

"This is an outstanding achievement and a credit to the efforts of the Kasbah Exploration and Resource Development team. The latest drilling has effectively bridged the Gap Zone and has linked the resource across 1.5 km of the Meknes Trend.

The potential to further increase the size and scale of the Achmmach Tin Project is significant. The Meknes Trend remains open to the west, east and at depth and proximate targets such as those within the newly named Sidi Addi Trend offer another opportunity to enhance the project economics.

The pre-feasibility study (PFS) will be completed in April and the 5 diamond rigs at Achmmach will continue with in-fill and extensional drilling of the Meknes Trend as Kasbah advances towards the delivery of a second resource upgrade mid-year.

Achmmach continues to grow and with this 150% increase in contained tin (to 135,000 tonnes) has established the project as the one of the largest and highest quality hard rock tin projects in development in the world."

ENDS

A handwritten signature in blue ink, appearing to read "Wayne Bramwell", with a stylized flourish underneath.

**Wayne Bramwell**  
Managing Director  
Phone: +61 8 9463 6651

Email: [info@kasbahresources.com](mailto:info@kasbahresources.com)

*The information in this report which relates to Mineral Resources is based on information compiled by Michael V. McKeown who is a Fellow of the Australasian Institute of Mining and Metallurgy. Michael McKeown is employed by Mining One Pty Ltd and he has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Michael McKeown consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

## **Appendix A- Technical Information Regarding the Estimate**

### **□ Geological Setting**

Tin as cassiterite ( $\text{SnO}_2$ ) mineralisation occurs in envelopes of tourmaline alteration within folded meta-sediments. The tin is present in quartz-cassiterite veinlets within the envelopes. The envelopes dip moderately to steeply to the north and the quartz-cassiterite veinlets dip steeply to the north-west.

### **□ Drilling**

The database on which this resource estimate was based included diamond drill holes drilled by Kasbah Resources from 2007 to January 2012 (up to and including drill hole number AD130) plus 32 diamond drill holes drilled by the Moroccan Bureau de Recherches et des Participations Minières in the early 1990s.

The previous resource estimate made in August 2010 used the results of 46 holes drilled by Kasbah for a total drilled length of 15,200m. This March 2012 resource estimate used results from 130 holes drilled by Kasbah for a total length of 41,000m.

The diamond drill holes are HQ and NQ in diameter.

### **□ Drill hole Collars**

The collars of 24 of the holes drilled by BRPM were picked up by a Surveyor while the coordinates of 5 holes drilled from the surface and 3 holes drilled from underground were taken from BRPM records.

The collars of holes drilled by Kasbah were picked up by a Surveyor.

### **□ Drill hole Directional Surveys**

The directional survey methods used for the holes drilled by BRPM are not known.

For the Kasbah holes, surveys of the dips at drill hole collars were made using a clinometer. Down-hole surveys were made using single-shot and multi-shot cameras at 25 to 50m intervals. Current practice is to survey holes at nominal 25m intervals.

### **□ Geometry of Intercepts**

Generally, Kasbah has drilled holes into the Meknes mineralised envelopes from north to south which is at right angles to the interpreted strike of the mineralised envelopes and this is also the case for the BRPM holes used for this estimate. The holes have been drilled at dips from  $-38^\circ$  to  $-85^\circ$  which results in intercepts at right angles to  $45^\circ$  to the dip of the mineralised envelopes.

11 early holes were drilled from south to north at right angles to the strike. Recently, 6 holes were drilled from west to east along the strike of the mineralisation to help to validate the geological interpretation.

### **□ Drill hole Spacing**

Holes were initially drilled on sections which are 80m apart. Infill holes were drilled on intermediate sections bringing the section spacing down to 40m. On section, intersections of the mineralised envelopes range from 25m or less in the shallower envelopes to 100m or more in the deeper envelopes.

Given the dimensions of the mineralised envelopes, these spacings are considered adequate to classify the resource as either Indicated Resources or Inferred Resources.

#### **Core Logging and Photography**

Drill core is logged and photographed. Geological logs record codes for lithology, alteration, weathering, mineralisation, veining and geological structures. During logging, the core is scanned using a hand-held Niton Handheld XRF gun which is capable of detecting tin. The logged data is entered into a digital database. Geological logging is adequate for resource estimation.

#### **Sampling techniques**

Core to be assayed is identified from the geological logging and the results of the Niton Handheld XRF scanning. Core for assay is sawn in half along its longitudinal axis. Samples are taken at 1.0m lengths, allowing for geological boundaries.

#### **Data spacing and distribution**

Data spacing and distribution is sufficient to establish geological and grade continuity which is appropriate for the estimation and classification of Mineral Resources.

#### **Sample preparation and assaying**

Samples have either been directly shipped as half core to the assay laboratory or more recently crushed on site before subsampling and shipped to independent laboratories for assay. All holes from AD028 onwards have been assayed by laboratories of the ALS Group.

Sn assays of BRPM samples were determined using Inductively Coupled Plasma (ICP) method. Kasbah assays were determined using Fused Bead X-Ray Fluorescence (XRF) which is the current industry standard for tin assays. The BRPM assays were checked by re-sampling some BRPM core and submitting the samples for Fused Bead XRF assays which showed that the ICP assays were acceptable.

Many of the holes which BRPM drilled that intersect the mineralised envelopes have been duplicated by Kasbah holes and assays from only 12 BRPM holes were used in the resource estimate.

Samples are routinely assayed for other significant elements including Cu, As, S, Sb, Fe, Pb and Zn.

#### **Quality Control procedures**

Third party Sn standards are inserted into the samples submitted for assay at the rate of 1 in 20 samples. Duplicate samples are inserted at the rate of 1 in 20. Blanks are inserted at the rate of 1 in 50. The standards, duplicates and blanks show acceptable levels of accuracy and precision.

#### **Audits or reviews**

The drill hole database was reviewed by Mining One prior to the resource estimation. This resource estimate by Mining One has not been reviewed by other external consultants.

#### **Core recovery**

Core recovery is good to excellent with less than 7% core loss in all core and less than 5% loss in all core from deeper than 30m down-hole.

### □ Geological interpretation

Kasbah geologists at the Achmmach Project interpreted the mineralised envelopes used for the estimation. The mineralised envelopes were based on geological interpretation of tourmaline alteration taking into account the occurrence of tin in the mineralised envelopes and also geological structure. In general, the envelopes include material which contains more than 0.1% Sn.

In addition to the mineralised envelopes, felsic dykes, mafic dykes and faults have been interpreted.

The mineralised envelopes are interpreted on sections which are 40m to 80m apart. The envelopes are not extrapolated more than 40m past the end sections. Confidence in the geological interpretation and grade continuity is higher for the sections which are 40m apart and the mineralisation classified as Indicated Mineral Resource occurs on the 40m sections.

The Meknes Trend mineralised envelopes strike about east-west on the Achmmach local grid and are known over a strike length of over 1.5 km. The envelopes dip moderately to steeply to the north and are defined over a vertical interval of approximately 500m. The envelopes range from a few metres to over 50m thick. The mineralised envelopes have been interpreted as 17 zones some of which have been cut by faults, although the faults have caused no significant offset of the envelopes. Some of the thicker zones break up into narrower individual fingers up and down dip.

Wireframes of the mineralised envelopes, the dykes and faults have been created.

### □ Estimation and modelling techniques

Drill hole samples for resource estimation were selected within the boundaries of mineralised envelopes and composited to 1.0m lengths down-hole, using length weighting.

Surpac software was used for variography, block modelling and grade estimation.

A block model was created with the dimensions:

- X 1800m E to 3600m E
- Y 49700m N to 50400m N
- Z 500m RL to 1200m RL

The block size used was 10m (X) \* 10m (Y) \* 10m (Z) with sub-celling to 2.5m (X) \* 2.5m (Y) \* 2.5m (Z) where appropriate along geological boundaries. Cells in the block model were coded with zone numbers.

Tin grades were estimated by 3 dimensional ordinary kriging using only samples from specific zones to estimate the grades of those zones in the block model. Grade interpolation used kriging parameters with a maximum range down the dip of the quartz-cassiterite veinlets, that is,  $-80^{\circ}$  towards  $315^{\circ}$ .

The search ellipse for the grade interpolation had a maximum range down the dip of the mineralised envelopes, that is,  $-50^{\circ}$  towards  $350^{\circ}$ , and the across dip range was restricted so that grade was not interpolated across fingers of the larger lenses.

### □ Moisture

All tonnages are reported on a dry tonnes basis.

### □ Cut-off grade and top-cutting

The distribution of composited tin grades was approximately log-normal and very few extremely high grades were present and no top-cutting of tin grades was applied. A cut-off grade of 0.5% Sn was used to report tonnage and grade from the block model. The cut-off grade is appropriate for the reporting of Mineral Resources.

**Mining and metallurgical assumptions**

No assumptions about mining method, minimum mining width, mining dilution or processing recoveries were made.

**Density**

Over 2,200 density estimates have been made on diamond drill core by weighing the core in air and in water (Archimedes' Method). A block model of the densities was created by simple averaging of densities into 10m \* 10m \* 10m blocks.

The average of the mineralised envelopes was estimated to be 2.85 tonnes per cubic metre which is reasonable given the mineralogy of the envelopes.

**Mineral Resource Classification**

Resource categories were based on confidence in geological and grade continuity which in turn depended on the density of drilling. Resources were classified as Indicated Mineral Resources in the area where there was drilling on 40m sections, that is from section 1970m E to 2470m E, but only if the mineralised envelopes had been adequately tested to justify this classification.

Beyond those classification parameters, the resource was classified as Inferred Mineral Resource.