

Kasbah Resources Limited ACN 116 931 705

Notice of Annual General Meeting

Explanatory Statement and Proxy Form

Including a resolution to approve the Convertible Loan Facility to be provided by Pala Investments Limited

Date of Meeting: 20 December 2018

Time of Meeting: 2.00pm (AEDT)

Place of Meeting: HLB Mann Judd Level 9, 575 Bourke Street Melbourne Victoria 3000



Dear Shareholder

On 15 October 2018, Kasbah announced a proposal to raise A\$5 million by way of a convertible loan from Pala (the "**Convertible Loan Facility**").

If approved by Shareholders, the Convertible Loan Facility will be used to refinance the existing Pala facility and the approximately A\$1 million additional funding the Convertible Loan Facility provides to the Company will be used to fund preliminary development expenditure in relation to the Achmmach Tin Project for project financing, engineering and technical optimisation work, and provide working capital.

In accordance with ASIC's guidance, the Company commissioned an independent expert to provide an opinion on whether the Proposed Transaction is 'fair' and 'reasonable'.

The Independent Expert has concluded that the Proposed Transaction is 'not fair' but it is 'reasonable'.

A complete copy of the Independent Expert's Report is provided in Appendix 2 to this Notice. Shareholders are encouraged to read the Independent Expert's Report in its entirety before making a decision on how to vote on Resolution 8.

Prior to agreeing the proposed Convertible Loan Facility, the Kasbah Board and management team extensively explored a variety of funding and refinancing options for the Company. These included discussions with existing shareholders, broking houses, potential new investors and other stakeholders. The Kasbah Board considers that the Convertible Loan Facility represents the best available funding and refinancing option for the Company, subject to consideration of any alternative proposals that may arise between now and Shareholders voting on the proposed Convertible Loan Facility at the Company's 2018 AGM on 20 December 2018.

The Convertible Loan Facility, if approved by shareholders, has a number of benefits for the Company. The facility:

- Provides approximately A\$1 million of additional funding for Kasbah. This is incremental to the A\$0.5 million already advanced to the Company by Pala after the announcement of the proposed Convertible Loan Facility;
- Enables the Company to continue funding its share of Achmmach project development. Near term priorities include preliminary engineering work and progressing the project debt funding workstream;
- Removes a near-term repayment event of the existing Pala facility which is due to mature on the 31 March 2019 (following Pala's agreement to extend the maturity date from 31 December 2018, to allow Kasbah to continue with the execution of its plans while shareholder approval is sought for the Convertible Loan Facility, as announced by the Company on 15 October 2018) and will be extended to 31 December 2019 or 31 December 2020 (at the election of Kasbah), if the Convertible Loan Facility achieves financial close; and
- Allows interest and fees to be capitalised, maximising the net additional proceeds to the Company and ensuring that cash payments are not required to keep the facility in good standing prior to maturity.

The amount of additional capital advanced by Pala under the Convertible Loan Facility is an interim funding measure to seek to place Kasbah in a stronger position to raise the additional capital required to fund its activities in the medium term and ultimately raise the capital required to fund its share of the equity requirements for the Achmmach project debt funding. Shareholders should note that the further equity funding requirements may dilute the interests of current Shareholders in the Company (or the Achmmach



project) in the future and there is a risk that Kasbah may be unable to obtain the debt and equity finance required to advance development of the Achmmach project on commercially acceptable terms or at all.

The Board acknowledges that if Pala were to convert the loan, Pala would significantly increase its voting power in the Company. Shareholders should note that:

- If Pala were to convert the full outstanding balance upon financial close, it would have a resulting voting power in the Company of 44.2%;
- Any shares issued to Pala will be at an issue price of 1.2 cents, which is a 50% premium to the closing Kasbah share price prior to announcement of the Convertible Loan Facility and a 9.1% premium to the Kasbah share price on 15 November 2018;¹
- Any shares issued under the Convertible Loan Facility (up to a maximum of 19.9%)² will be subject to escrow until 30 June 2019 to mitigate the risk of a significant portion of the Company's share capital being sold during this period;³
- Pala has stated that it has no present intention to exercise its conversion rights under the Convertible Loan Facility;
- The Board does not consider it likely that Pala would seek to exercise conversion in advance of maturity, notification of an intention to pre-pay from Kasbah or a major development involving the Company, such as a final investment decision in respect of the Achmmach Tin Project;
- The maximum voting power Pala could achieve under the Convertible Loan Facility is 48.9%, assuming that the maturity date of the Convertible Loan Facility is extended to 31 December 2020 by Kasbah and is held until maturity by Pala; and
- Pala does not have any anti-dilution rights under the Convertible Loan Facility and may end up
 with a resulting ownership below the levels stated above, for example in the event the Company
 were to raise equity prior to the loan converting in full.⁴

If the Convertible Loan Facility is not approved by shareholders, the full outstanding balance of the existing Pala facility will be payable by 31 March 2019 (expected to be A\$4.1 million at that date, including interest and capitalised fees). The Company will be required to secure alternative funding to repay the existing Pala loan in this case and has no certainty of being able to do so. To date, the Company has not received any alternative offer which will facilitate the repayment of the existing Pala loan (maturing on 31 March 2019, following Pala's agreement to extend the maturity date from 31 December 2018) and funding the Company's further expenditure requirements.

As a separate initiative, the Company is undertaking a share purchase plan (the "**SPP**"), under which eligible shareholders (being shareholders with registered addresses in Australia and New Zealand) can apply for up to A\$15,000 worth of Shares at the issue price of \$0.011 per Share (being the volume weighted average price for the 5 trading days ending on 15 November 2018) free of brokerage and transaction costs. The SPP provides the Company's shareholders with the opportunity to increase their shareholding in the Company at a price which reflects current market prices and is below the conversion price under the Convertible Loan Facility. The maximum amount of shares that can be issued under the plan is 313,523,922 and if the Company receives applications for more than that number of shares it will apply a pro-rata scale-

¹ The conversion price will increase to 12 cents per share if Resolution 5 (Consolidation of Share Capital) is approved. ² The maximum additional shareholding that Pala can acquire under the Convertible Loan Facility up to 30 June 2019 is 23.7%.

³ To avoid doubt, the escrow does not apply to Pala's current shareholding of 21.5%.

⁴ But noting that Pala has a separate anti-dilution right under a share subscription agreement with the Company, dated December 2016 which could apply to such an equity raising. The anti-dilution right under the subscription agreement lapses when Pala's holding in the Company exceeds 25%.



back. The SPP is not underwritten and participation in the SPP is optional. As Pala does not have a registered address in Australia or New Zealand, it is not eligible to participate in the SPP.

Proceeds raised through the SPP will be used for general working capital purposes and to fund project development and other activities associated with the Achmmach Tin Project. The directors will also consider the proceeds raised from the SPP in determining how much (if any) of the further approximately A\$1 million available under the Convertible Loan Facility from Pala will be drawn following shareholder approval and whether to repay any of the amounts owing under the Existing Loan Facility in order to reduce the overall amount outstanding under the Convertible Loan Facility.

As the SPP is not underwritten and participation is optional, the SPP is not an alternative to the Convertible Loan Facility (which is committed funding, subject to Resolution 8 being approved). Whilst participation by shareholders in the SPP may raise proceeds that can be used to reduce the amount outstanding under the Convertible Loan Facility, it is unlikely that the SPP will raise sufficient funds to allow the Company to repay the Existing Loan Facility (so that it is not necessary to draw the Convertible Loan Facility).

Therefore, the Board (with Mr Buttenshaw, as Pala's nominee director, abstaining) recommends that Shareholders vote in favour of Resolution 8 approving the Convertible Loan Facility.

Except where otherwise stated, the Board unanimously believes that all of the proposals set out in this Notice of General Meeting, including the resolution to approve the issue of shares under the Convertible Loan Facility, are in the best interests of shareholders as a whole and the Company and unanimously recommends that you vote in favour of all the resolutions, provided that:

- Mr John Gooding abstains from making a recommendation on Resolution 2 (Re-election of Mr John Gooding as a Director of the Company)
- Mr Graham Ehm abstains from making a recommendation on Resolution 3 (Election of Mr Graham Ehm as a Director of the Company)
- Mr Martyn Buttenshaw abstains from making a recommendation on Resolution 4 (Election of Mr Martyn Buttenshaw as a Director of the Company) and Resolution 8 (Approval of Convertible Loan Facility, as Mr Buttenshaw is an Advisor of the Lender)
- the Board abstains, in the interests of corporate governance, from making a recommendation in relation to Resolution 9 (Approval of Potential Termination Benefits).

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John Gooding Chairman Kasbah Resources Limited

KASBAH RESOURCES LIMITED

ACN 116 931 705

Registered office: Level 13, 459 Collins Street, Melbourne Victoria 3000

NOTICE OF ANNUAL GENERAL MEETING

Notice is hereby given that the Annual General Meeting of Shareholders of Kasbah Resources Limited (the "Company") will be held at the offices of HLB Mann Judd, Level 9, 575 Bourke St, Melbourne VIC 3000 at 2.00pm (AEDT) on 20 December 2018 ("Annual General Meeting" or "Meeting").

AGENDA

The Explanatory Statement and Proxy Form which accompany and form part of this Notice, include defined terms and describe in more detail the matters to be considered. Please consider this Notice, the Explanatory Statement and the Proxy Form in their entirety.

ORDINARY BUSINESS

Receipt and Consideration of Accounts & Reports

To receive and consider the financial report of the Company and the related reports of the Directors (including the Remuneration Report) and auditors for the year ended 30 June 2018.

Note: Except for as set out in Resolution 1, there is no requirement for Shareholders to approve these reports. Accordingly, no Resolution will be put to Shareholders on this item of business.

Resolution 1: Adoption of Remuneration Report

To consider and, if thought fit, to pass the following resolution as an ordinary resolution:

"That for the purpose of Section 250R(2) of the Corporations Act and for all other purposes, the Remuneration Report (included in the Directors' Report) for the financial year ended 30 June 2018 be adopted."

Resolution 2: Re-election of Mr John Gooding as a Director of the Company

To consider and, if thought fit, pass the following resolution as an ordinary resolution:

"That Mr John Gooding, being a Director who retires under clause 13.2 of the Company's Constitution and Listing Rule 14.4, and being eligible, offers himself for re-election, is re-elected as a Director of the Company"

Resolution 3: Election of Mr Graham Ehm as a Director of the Company

To consider and, if thought fit, pass the following resolution as an ordinary resolution:

"That Mr Graham Ehm, having been appointed as a Director of the Company since the last Annual General Meeting and who retires under clause 13.4 of the Company's Constitution and Listing Rule 14.4, and being eligible, is elected as a Director of the Company."

Resolution 4: Election of Mr Martyn Buttenshaw as a Director of the Company

To consider and, if thought fit, pass the following resolution as an ordinary resolution:

"That Mr Martyn Buttenshaw, having been appointed as a Director of the Company since the last Annual General Meeting and who retires under clause 13.4 of the Company's Constitution and Listing Rule 14.4, and being eligible, is elected as a Director of the Company."

Resolution 5: Consolidation of Share Capital

To consider and, if thought fit, pass the following resolution as an ordinary resolution:

That, for the purposes of section 254H of the Corporations Act 2001, Listing Rule 7.20, clause 10.1 of the Company's Constitution and for all other purposes, the share capital of the Company be consolidated on the basis that every ten (10) fully paid ordinary shares be consolidated into one (1) share, and where this consolidation results in a Shareholder holding a fraction of a share, the Directors be authorised to round that holding up to the nearest whole share, to take effect in the manner and on the date described in the Explanatory Statement."

SPECIAL BUSINESS

Resolution 6: Renewal of Proportional Takeover Bid Provision in the Constitution

To consider and, if thought fit, to pass the following resolution as a special resolution:

"That, for the purposes of Section 648G(4) of the Corporations Act 2001(Cth) and for all other purposes the Shareholders approve the renewal of clause 36 of the Company's Constitution."

Resolution 7: Approval of 10% Placement Facility

To consider and, if thought fit, pass the following resolution as a special resolution:

"That, pursuant to and in accordance with Listing Rule 7.1A and for all other purposes, Shareholders approve the issue of Equity Securities up to 10% of the issued capital of the Company (at the time of the issue) calculated in accordance with the formula prescribed in Listing Rule 7.1A.2 and on the terms and conditions in the Explanatory Statement."

Resolution 8: Approval of the Convertible Loan Facility

To consider and, if thought fit, pass the following resolution as an ordinary resolution:

"That, for the purposes of item 7 of section 611 of the Corporations Act, ASX Listing Rule 10.1 and for all other purposes, approval is given for the Convertible Loan Facility and associated security arrangements including:

- the issue of up to 559,003,595 Shares (55,900,360 post consolidation if Resolution 5 is approved) to Pala Investments Limited under the Convertible Loan Facility;,
- Pala Investments Limited and the Pala Associated Entities acquiring a Relevant Interest in no more than 48.9% of <u>all</u> Shares as a result of the acquisition of Shares by Pala Investments Limited under the Convertible Loan Facility, where Pala's and the Pala Associated Entities' Voting Power in the Company would increase from a starting point that is above 20%; and
- the Company granting a first ranking specific security to Pala Investment Limited over the Company's 75% shareholding in Atlas Tin SAS, if required to do so under the terms of the Convertible Loan Facility.

in each case in accordance with the terms and conditions of the Convertible Loan Facility which are described in the Explanatory Statement."

Resolution 9: Approval of Potential Termination Benefits

To consider and, if thought fit, pass the following resolution as an ordinary resolution:

"That, for the purposes of Sections 200B and 200E of the Corporations Act 2001 (Cth), Listing Rule 10.19 and for all other purposes, approval be given for the giving of benefits by the Company or any of its related bodies corporate to individuals who currently or in the future hold a managerial or executive office in the Company or a related body corporate, in connection with that person ceasing to be a Director or ceasing to hold a managerial or executive office in the Company or a related body corporate, as set out in the Explanatory Statement."

DATED 16 November 2018

By order of the Board

Keith Pollocks Company Secretary

Notes

- 1. Entire Notice: The details of the resolutions contained in the Explanatory Statement accompanying this Notice of Meeting should be read together with, and form part of, this Notice of Meeting.
- 2. Record Date: The Company has determined that for the purposes of the Annual General Meeting, shares will be taken to be held by the persons who are registered as holding the shares at 7:00pm on the date 48 hours before the date of the Annual General Meeting. Only those persons will be entitled to vote at the Annual General Meeting and transfers registered after that time will be disregarded in determining entitlements to attend and vote at the Annual General Meeting.

3. Proxies

- a. Votes at the Annual General Meeting may be given personally or by proxy, attorney or representative.
- b. Each shareholder has a right to appoint one or two proxies.
- c. A proxy need not be a shareholder of the Company.
- d. If a shareholder is a company it must execute under its common seal or otherwise in accordance with its Constitution or the Corporations Act.
- e. Where a shareholder is entitled to cast two or more votes, the shareholder may appoint two proxies and may specify the proportion of number of votes each proxy is appointed to exercise.
- f. If a shareholder appoints two proxies, and the appointment does not specify the proportion or number of the shareholder's votes, each proxy may exercise half of the votes. If a shareholder appoints two proxies, neither proxy may vote on a show of hands.
- g. A proxy must be signed by the shareholder or his or her attorney who has not received any notice of revocation of the authority. Proxies given by corporations must be signed in accordance with corporation's constitution and Corporations Act.
- h. To be effective, proxy forms must be received by the Company's share registry (Link Market Services) no later than 48 hours before the commencement of the Annual General Meeting, this is no later than 2.00pm (AEDT) on 18 December 2018. Any proxy received after that time will not be valid for the scheduled meeting.

4. Corporate Representative

Any corporate shareholder who has appointed a person to act as its corporate representative at the Meeting should provide that person with a certificate or letter executed in accordance with the Corporations Act authorising him or her to act as that company's representative. The authority may be sent to the Company and/or registry in advance of the Meeting or handed in at the Meeting when registering as a corporate representative.

5. Voting Exclusion Statement:

Resolution 1

The Company will disregard any votes cast on this Resolution (in any capacity) by or on behalf of a member of the Key Management Personnel (being those persons described as such in the Remuneration Report) or a closely related party of such a member unless the vote cast as proxy for a person entitled to vote:

- (a) in accordance with a direction on the Proxy Form; or,
- (b) by the Chairman of the meeting as proxy for a person entitled to vote and the Chairman has received express authority to vote undirected proxies as the Chairman sees fit.

Accordingly, if you intend to appoint a member of Key Management Personnel as your proxy, please ensure that you direct them how to vote. If you intend to appoint the Chairman of the Meeting as your proxy, you can direct him to vote by marking the box for Resolution 1. By marking the Chairman's box on the Proxy Form you acknowledge that the Chairman of the Meeting will vote in favour of this item of business as your proxy.

Resolutions 2, 3, 4, 5 and 6

There are no voting exclusions on these Resolutions.

Resolution 7

The Company will disregard any votes cast in favour of this Resolution by any person who is expected to participate in the proposed issue or any person who will obtain a material benefit as a result of the proposed issue, except a benefit solely in the capacity of a holder of ordinary shares, and any associate of such person.

However, the Company need not disregard a vote on this Resolution if:

- (a) it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form; or
- (b) it is cast by the person chairing the Meeting as proxy for a person who is entitled to vote in accordance with a direction on the Proxy Form to vote as the proxy decides.

Resolution 8

The Company will disregard any votes cast in favour of this Resolution by the Lender and any of its Associates or the Pala Associated Entities or any of their Associates.

However, the Company need not disregard a vote on this Resolution if:

- (a) it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form; or
- (b) it is cast by the person chairing the Meeting as proxy for a person who is entitled to vote in accordance with a direction on the Proxy Form to vote as the proxy decides.

Resolution 9

The Company will disregard any votes cast in favour of this Resolution by or on behalf of any officer of the Company or any of its child entities who is entitled to participate in a termination benefit, or an associate of such person, or by any Key Management Personnel or a closely related party of Key Management Personnel as a proxy (except as set out below).

However, the Company need not disregard a vote if it is cast:

- (a) by a person as proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form; or
- (b) by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with the direction on the Proxy Form to vote as the proxy decides.

If you appoint the Chairman as your proxy and you do not direct the Chairman how to vote, you will be expressly authorising the Chairman to exercise the proxy even if the relevant resolution is connected directly or indirectly with the remuneration of a Key Management Personnel for the Company.

6. Enquiries

Shareholders are invited to contact the Company Secretary, Keith Pollocks on (03) 9482 2223 if they have any queries in respect of the matters set out in these documents.

EXPLANATORY STATEMENT

Receipt and Consideration of Accounts & Reports

A copy of the Annual Report for the financial year ending 30 June 2018 (which incorporates the Company's financial report, reports of the Directors (including the Remuneration Report and the Auditors Report) is not enclosed as there is no longer a requirement for the Company to incur the printing and distribution cost associated with doing so for all Shareholders. You may obtain a copy free of charge in hard copy form by contacting the Company by phone at (03) 9482 2223, and you may request that this occurs on a standing basis for future years. Alternatively, you may access the Annual Report at the Company's website: www.kasbahresources.com or via the Company's announcement platform on ASX. Except as set out in Resolution 1, no Resolution is required on these reports.

Resolution 1: Adoption of Remuneration Report

Background

Section 250R(2) of the Corporations Act requires that a resolution to adopt the remuneration report must be put to the vote at the Annual General Meeting. The vote on this Resolution is advisory only and does not bind the Directors or the Company.

The Remuneration Report is set out in the Directors' Report in the Company's 2018 Annual Report. The Remuneration Report sets out the Company's remuneration arrangements for the Directors and senior management of the Company.

In accordance with Section 250SA of the Corporations Act 2001, Shareholders will be provided with a reasonable opportunity to ask questions concerning, or make comments on, the remuneration report at the Annual General Meeting.

The Directors will consider the outcome of the vote and comments made by Shareholders on the Remuneration Report at the Meeting when reviewing the Company's remuneration policies.

Board Recommendation

The Board encourages all eligible Shareholders to cast their votes in favour of this Resolution. The Chairman of the Meeting intends to vote undirected proxies in favour of this Resolution.

Resolution 2: Re-election of Mr John Gooding as a Director of the Company

Background

Clause 13.2 of the Constitution of the Company requires that at every Annual General Meeting, one-third or the closest number to one-third (rounding upwards in case of doubt) of the directors shall retire by rotation from office, and provides that such Directors are eligible for re-election at the meeting. Mr John Gooding being eligible, offers himself for re-election.

Mr Gooding was appointed as a Non-Executive Director on 8 February 2017.

Mr Gooding is a mining engineer with over 40 years of experience in gold and base metals operations including mining, exploration, smelting and refining, sales and marketing and major capital expansion projects. He most recently served as the Managing Director and Chief Executive Officer of Highlands Pacific for nine and a half years until November 2016, and prior to this held executive management positions with Normandy Mining, MIM, Xstrata, Ok Tedi Mining and Roche Mining. Mr Gooding is also Non-Executive Chairman of Hillgrove Resources Limited and Non-Executive Director of KGL Resources Limited.

Mr Gooding holds both NT and NSW Mine Managers Certificates, is a Fellow of both the Institute of Engineers and the Australasian Institute of Mining and Metallurgy and is a member of the Australian Institute of Company Directors.

Board Recommendation

The Board (with Mr Gooding abstaining), recommends that Shareholders vote in favour of the re-election of Mr Gooding. The Chairman of the Meeting intends to vote undirected proxies in favour of Mr Goodings' re-election.

Resolution 3: Election of Mr Graham Ehm as a Director of the Company

Background

Mr Graham Ehm was appointed as a Non-Executive Director on 22 January 2018 as a casual vacancy and is eligible for election.

Mr Ehm is a highly experienced and successful resource sector executive with more than 40 years of diverse experience in mine operations and project management, covering the nickel, phosphate, copper, uranium and gold sectors. He has forged a long and successful career with major global gold miner, AngloGold Ashanti Ltd. He is currently Executive Vice President for Group Planning and Technical and prior to this appointment in 2013 served as Executive Vice President of Australasia overseeing the development of the Tropicana Gold mine in Western Australia.

Mr Ehm held previous senior roles with AngloGold Ashanti including Executive Vice President of Tanzania Operations, General Manager - Sunrise Dam Gold Mine, Project Manager - Union Reefs Gold Mine and Project Manager - Boddington Gold Mine.

Mr Ehm has served as Non-Executive Director of Mining3 (previously CRC Mining) and as Non-Executive Director of the Minerals Council of Australia. He is a qualified metallurgist, a member of the Aus IMM and a member of the Australian Institute of Company Directors.

Board Recommendation

The Board (with Mr Ehm abstaining), recommends that Shareholders vote in favour of the election of Mr Ehm. The Chairman of the Meeting intends to vote undirected proxies in favour of Mr Ehm's election.

Resolution 4: Election of Mr Martyn Buttenshaw as a Director of the Company

Background

Mr Martyn Buttenshaw was appointed as a Non-Executive Director on 22 January 2018 as a casual vacancy and is eligible for election.

Mr Buttenshaw is an Advisor to Pala Investments Limited (i.e. the Lender). He has a strong depth of direct mining experience. Prior to joining Pala in 2010, he was Business Development Manager with Anglo American's ferrous metals business unit, and he was also previously a Senior Mining engineer with Rio Tinto. Mr Buttenshaw works closely with Pala's portfolio companies to assist in the execution of their strategic plans and the achievement of their operational goals. He is currently Chairman of Melior Resources (TSX:MLR) and holds an MBA (with distinction) from the London Business School and an MEng (First Class) in Mining Engineering from the Royal School of Mines, Imperial College, London.

Board Recommendation

The Board (with Mr Buttenshaw abstaining), recommends that Shareholders vote in favour of the election of Mr Buttenshaw. The Chairman of the Meeting intends to vote undirected proxies in favour of Mr Buttenshaw's election.

Resolution 5: Consolidation of Share Capital

Background

The Directors consider that it is appropriate at this point in time to rationalise the number of Shares the Company will have on issue by consolidating the Share capital of the Company on a 1 for 10 basis.

The proposed share consolidation will:

- (a) Ensure that each Shareholder's proportionate interest in the Company remains unchanged, subject to rounding up of fractional entitlements to the next whole number of Shares; and
- (a) Reduce the number of Shares from 1,045,079,742⁵ to approximately 104,507,974⁶ representing a 90% reduction in the number of Shares on issue thereby making the number of Shares on issue more manageable.

Key details for the share consolidation process, if approved by Shareholders, are:

- (b) The Share consolidation will take effect from Thursday, 27 December 2018.
- (c) The Corporations Act and the Constitution allows a consolidation of share capital provided Shareholders agree by ordinary resolution.
- (d) Where the consolidation results in a Shareholder's account having an entitlement to a fraction of a Share, that fraction will be rounded up to the nearest whole number of Shares.
- (e) The consolidation will not materially change the proportionate interest that each Shareholder holds in the Company, because the consolidation ratio applies (subject to rounding) to all present Shares.
- (f) Current holding statements for Shares in the Company will be replaced by new holding statements showing the number of Shares held post the consolidation.

As the Company is listed on ASX, the market price of Shares is of course impacted by a number of factors, meaning that, over time, the share price may increase or decrease, and Directors can give no guarantees concerning the Share price.

The timetable for the share consolidation process is as follows.

| Event | Indicative date |
|--|----------------------------|
| Meeting held, including Resolution to approve Share Consolidation | Thursday, 20 December 2018 |
| Company notifies ASX that Shareholders have approved the Share Consolidation | Thursday, 20 December 2018 |
| Last day for trading in pre-consolidated Shares | Friday, 21 December 2018 |
| Trading in the consolidated Shares on a deferred settlement basis starts | Monday, 24 December 2018 |
| Last day for Company to register Share transfers on a pre- consolidated basis | Thursday, 27 December 2018 |
| First day for Company to register share transfers on a consolidated basis and first day for Company to issue holding statements for Shares on a consolidated basis | Friday, 28 December 2018 |
| Company announces to ASX that despatch of the new holding statements has occurred | Monday, 31 December 2018 |
| Deferred settlement trading ends | Friday, 4 January 2019 |
| Normal T+2 trading in consolidated Shares starts | Monday, 7 January 2019 |

⁵ Plus any Shares issued under the SPP.

⁶ Plus 1 Share for every 10 Shares issued under the SPP.

If the Company, in its absolute discretion, forms the view that a Shareholder has been party to any shareholding splitting or division to obtain an advantage from the rounding of fractional entitlements, then the Company may take appropriate action, including (without limitation) the disregarding of the splitting or division, for the purposes of dealing with fractional entitlements.

Board Recommendation

The Board unanimously recommends that Shareholders vote in favour of this Resolution. The Chairman of the Meeting intends to vote undirected proxies in favour of this Resolution.

Resolution 6: Renewal of Proportional Takeover Bid provision in the Constitution

Background

Section 648G(1) of the Corporations Act provides that a company's proportional takeover approval provisions, unless sooner omitted from its constitution, cease to apply at the end of 3 years from adoption or renewal as appropriate unless otherwise specified. When the provisions cease to apply, the company's constitution is modified by omitting the provisions.

A company may renew its proportional takeover approval provisions in the same manner in which a company can modify its constitution (i.e. by special resolution of shareholders).

A proportional takeover bid is a takeover bid where the offer made to each shareholder is only for a proportion of that shareholder's shares. The proportional takeover provisions set out in clause 36 of the Constitution provides that a proportional takeover bid for Shares may only proceed after the bid has been approved by a meeting of Shareholders held in accordance with the terms set out in the Corporations Act. This clause will cease to have effect on the third anniversary of the date of the adoption of the last renewal of the clause.

Resolution 6 is a special resolution which will enable the Company to modify its Constitution by renewing clause 36 for a period of 3 years from the date of Shareholder approval. It is noted that Shareholder approval will not result in a change to the wording of clause 36.

The Company is permitted to seek further Shareholder approval to renew this clause for further periods of up to 3 years on each occasion.

A copy of the Company's Constitution is available to Shareholders upon request to the Company.

Information required by section 648G of the Corporations Act

(i) Effect of proportional takeover provisions

Where offers have been made under a proportional off-market bid in respect of a class of securities in a company, the registration of a transfer giving effect to a contract resulting from the acceptance of an offer made under such a proportional off-market bid is prohibited unless and until a resolution to approve the proportional off-market bid is passed or the deadline for obtaining such approval has passed.

(ii) Reason for proportional takeover provisions

A proportional takeover bid may result in control of the Company changing without Shareholders having the opportunity to dispose of all their Shares. By making a partial bid, a bidder can obtain practical control of the Company by acquiring less than a majority interest. Shareholders are exposed to the risk of being left as a minority in the Company and the risk of the bidder being able to acquire control of the Company without payment of an adequate control premium. These amended provisions allow Shareholders to decide whether a proportional takeover bid is acceptable in principle, and assist in ensuring that any partial bid is appropriately priced.

(iii) Knowledge of any acquisition proposals

As at the date of this Notice, no Director is aware of any proposal by any person to acquire (or increase the extent of) a substantial interest in the Company (other than the potential issue of Shares to Pala under the Convertible Loan Facility the subject of Resolution 8).

(iv) Advantages and disadvantages of the proportional takeover provisions during the period in which they have been in effect

The Directors consider that the proportional takeover provisions had no advantages or disadvantages for them during the period in which they have been in effect. The advantages and disadvantages of the proportional takeover provisions for Shareholders include those set out immediately below, which were applicable during the period in which they have been in effect.

(v) Potential advantages and disadvantages of proportional takeover provisions

The Directors consider that the proportional takeover provisions have no potential advantages or disadvantages for them and that they remain free to make a recommendation on whether an offer under a proportional takeover bid should be accepted.

The potential advantages of the proportional takeover provisions for Shareholders include:

- (a) the right to decide by majority vote whether an offer under a proportional takeover bid should proceed;
- (b) assisting in preventing Shareholders from being locked in as a minority;
- (c) increasing the bargaining power of Shareholders which may assist in ensuring that any proportional takeover bid is adequately priced; and
- (d) each individual Shareholder may better assess the likely outcome of the proportional takeover bid by knowing the view of the majority of Shareholders which may assist in deciding whether to accept or reject an offer under the takeover bid.

The potential disadvantages of the proportional takeover provisions for Shareholders include

- (a) proportional takeover bids may be discouraged;
- (b) lost opportunity to sell a portion of their Shares at a premium; and
- (c) the likelihood of a proportional takeover bid succeeding may be reduced.

Board Recommendation

Balancing the above advantages and disadvantages, the Board is of the view that the advantages of renewing the proportional takeover provision set out in clause 36 of the Constitution outweigh any disadvantages and unanimously recommend that Shareholders vote in favour of this Resolution. The Chairman of the Meeting intends to vote undirected proxies in favour of this Resolution.

Resolution 7: Approval of 10% Placement Facility

Background

Listing Rule 7.1A enables eligible entities to issue Equity Securities up to 10% of its issued share capital through placements over a 12 month period after the Annual General Meeting ("**10% Placement Facility**"). The 10% Placement Facility is in addition to the Company's 15% placement capacity under Listing Rule 7.1.

An eligible entity for the purposes of Listing Rule 7.1A is an entity that is not included in the S&P/ASX 300 Index and has a market capitalisation of \$300 million or less. The Company is an eligible entity.

The Company is now seeking Shareholder approval by way of a special resolution to have the ability to issue Equity Securities under the 10% Placement Facility.

The exact number of Equity Securities to be issued under the 10% Placement Facility will be determined in accordance with the formula prescribed in Listing Rule 7.1A.2 (see below).

The Company continues actively seeking to enhance the value of its assets and new investments. Should the Company utilise the 10% Placement Facility, it intends to use the funds to either accelerate the work on its current projects, acquire new assets, repay part of the Pala loan or to meet additional working capital requirements.

Description of Listing Rule 7.1A

(a) Shareholder approval

The ability to issue Equity Securities under the 10% Placement Facility is subject to shareholder approval by way of a special resolution at an Annual General Meeting. This means it requires approval of 75% of the votes cast by shareholders present and eligible to vote (in person, by proxy, by attorney or, in the case of a corporate shareholder, by a corporate representative).

(b) Equity Securities

Any Equity Securities issued under the 10% Placement Facility must be in the same class as an existing quoted class of Equity Securities of the Company.

The Company, as at the date of the Notice, has 1,045,079,742 Fully Paid Ordinary Shares on issue.

(c) Formula for calculating 10% Placement Facility

Listing Rule 7.1A.2 provides that eligible entities which have obtained shareholder approval at an Annual General Meeting may issue or agree to issue, during the 12 month period after the date of the Annual General Meeting, a number of Equity Securities calculated in accordance with the following formula:

(A x D)–E

- **A** is the number of shares on issue 12 months before the date of issue or agreement:
 - (A) plus the number of fully paid shares issued in the 12 months under an exception in Listing Rule 7.2;
 - (B) plus the number of partly paid shares that became fully paid in the 12 months;
 - (C) plus the number of fully paid shares issued in the 12 months with approval of holders of shares under Listing Rules 7.1 and 7.4. This does not include an issue of fully paid shares under the entity's 15% placement capacity without shareholder approval;
 - (D) less the number of fully paid shares cancelled in the 12 months.

Note that A has the same meaning in Listing Rule 7.1 when calculating an entity's 15% placement capacity.

D is 10%

E is the number of Equity Securities issued or agreed to be issued under Listing Rule 7.1A.2 in the 12 months before the date of the issue or agreement to issue that are not issued with the approval of shareholders under Listing Rule 7.1 or 7.4.

(d) Listing Rule 7.1 and Listing Rule 7.1A

The ability of an entity to issue Equity Securities under Listing Rule 7.1A is in addition to the entity's 15% placement capacity under Listing Rule 7.1.

The actual number of Equity Securities that the Company will have capacity to issue under Listing Rule 7.1A will be calculated at the date of issue of the Equity Securities in accordance with the formula prescribed in Listing Rule 7.1A.2.

(e) Minimum Issue Price

The issue price of Equity Securities issued under Listing Rule 7.1A must be not less than 75% of the VWAP of Equity Securities in the same class calculated over the 15 Trading Days immediately before:

- (i) the date on which the price at which the Equity Securities are to be issued is agreed; or
- (ii) if the Equity Securities are not issued within 5 Trading Days of the date in paragraph (i) above, the date on which the Equity Securities are issued.

(f) 10% Placement Period

Shareholder approval of the 10% Placement Facility under Listing Rule 7.1A is valid from the date of the Annual General Meeting at which the approval is obtained and expires on the earlier to occur of:

- (i) the date that is 12 months after the date of the Annual General Meeting at which the approval is obtained; or
- (ii) the date of the approval by shareholders of a transaction under Listing Rules 11.1.2 (a significant change to the nature or scale of activities) or 11.2 (disposal of main undertaking),

(10% Placement Period).

Listing Rule 7.1A

The effect of Resolution 7 will be to allow the Directors to issue the Equity Securities under Listing Rule 7.1A during the 10% Placement Period without using the Company's 15% placement capacity under Listing Rule 7.1.

Resolution 7 is a special resolution and therefore requires approval of 75% of the votes cast by Shareholders present and eligible to vote (in person, by proxy, by attorney or, in the case of a corporate Shareholder, by a corporate representative).

Specific information required by Listing Rule 7.3A

Pursuant to and in accordance with Listing Rule 7.3A, information is provided in relation to the approval of the 10% Placement Facility as follows:

- (a) The Equity Securities will be issued at an issue price of not less than 75% of the VWAP for the Company's Equity Securities over the 15 Trading Days immediately before:
 - (i) the date on which the price at which the Equity Securities are to be issued is agreed; or
 - (ii) if the Equity Securities are not issued within 5 Trading Days of the date in paragraph (i) above, the date on which the Equity Securities are issued.
- (b) If Resolution 7 is approved by Shareholders and the Company issues Equity Securities under the 10% Placement Facility, the existing Shareholders' voting power in the Company will be diluted as shown in the below table. Shareholders may be exposed to economic risk and voting dilution, including the following:
 - (i) the market price for the Company's Equity Securities may be significantly lower on the date of the issue of the Equity Securities than on the date of the Annual General Meeting; and
 - (ii) the Equity Securities may be issued at a price that is at a discount to the market price for the Company's Equity Securities on the issue date.

which may have an effect on the amount of funds raised by the issue of the Equity Securities.

The table below shows the dilution of existing Shareholders on the basis of the market price of Shares as at 15 November 2018 ("**Current Share Price**") and the current number of ordinary securities for variable "A" calculated in accordance with the formula in Listing Rule 7.1A(2) as at the date of this Notice.

The table also shows:

- two examples where variable "A" has increased, by 50% and 100%. Variable "A" is based on the number of
 ordinary securities the Company has on issue as at the date of this notice of meeting. The number of ordinary
 securities on issue may increase as a result of issues of ordinary securities that do not require Shareholder
 approval (for example, a pro rata entitlements issue or scrip issued under a takeover offer) or future specific
 placements under Listing Rule 7.1 that are approved at a future Shareholders' meeting, or the issue of Shares
 under the SPP or under the Convertible Loan Facility; and
- two examples of where the issue price of ordinary securities has decreased by 50% and increased by 100% as against the Current Share Price.

| | | Issue Price | | |
|--|---------------------------|--|-----------------------------------|---|
| Variable 'A' in Listing Rule 7.1A.2 | | \$0.005 50% decrease in Current Share Price | \$0.011 Current Share Price | \$0.022 100% increase in Current Share Price |
| Current Variable A 1,045,079,742 Shares | 10% Voting Dilution | 104,507,974 Shares | 104,507,974 Shares | 104,507,974 Shares |
| | Funds raised | \$574,794 | \$1,149,588 | \$2,299,175 |
| 50% increase in current Variable A 1,567,619,613 Shares | 10% Voting Dilution | 156,761,961 Shares | 156,761,961 Shares | 156,761,961 Shares |
| | Funds raised | \$862,191 | \$1,724,382 | \$3,448,763 |
| 100% increase in current Variable A 2,090,159,484 Shares | 10% Voting Dilution | 209,015,948 Shares | 209,015,948 Shares | 209,015,948 Shares |
| | Funds raised | \$1,149,588 | \$2,299,175 | \$4,598,351 |

The table has been prepared on the following assumptions:

- The Company issues the maximum number of Equity Securities available under the 10% Placement Facility.
- No Options (including any Options issued under the 10% Placement Facility) are exercised into Shares before the date of the issue of the Equity Securities.
- The 10% voting dilution reflects the aggregate percentage dilution against the issued share capital at the time of issue. This is why the voting dilution is shown in each example as 10%.
- The table does not show an example of dilution that may be caused to a particular Shareholder by reason of placements under the 10% Placement Facility, based on that Shareholder's holding at the date of the Annual General Meeting.
- The table does not show the effect of the issue of Equity Securities under the SPP.
- The table shows only the effect of issues of Equity Securities under Listing Rule 7.1A, not under the 15% placement capacity under Listing Rule 7.1.
- Pala does not exercise its conversion rights under the Convertible Loan Facility.
- The issue of Equity Securities under the 10% Placement Facility consists only of Shares. If the issue of Equity Securities includes Options, it is assumed that those Options are exercised into Shares for the purpose of calculating the voting dilution effect on existing Shareholders.
- The Current Share Price is \$0.011 (1.1 cent), being the closing price of the Shares on ASX on 15 November 2018.

- (c) The Company will only issue and allot the Equity Securities during the 10% Placement Period. The approval under Resolution 7 for the issue of the Equity Securities will cease to be valid in the event that Shareholders approve a transaction under Listing Rule 11.1.2 (a significant change to the nature or scale of activities or Listing Rule 11.2 (disposal of main undertaking).
- (d) The Company may seek to issue the Equity Securities for the following purposes:
 - non-cash consideration for the acquisition of the new assets and investments. In such circumstances the Company will provide a valuation of the non-cash consideration as required by Listing Rule 7.1A.3; or
 - (ii) cash consideration. In such circumstances, the Company intends to use the funds raised towards an acquisition of new assets or investments (including expenses associated with such acquisition), continued expenditure on the Company's current business and/or general working capital.
- (e) The Company will comply with the disclosure obligations under Listing Rules 7.1A(4) and 3.10.5A upon issue of any Equity Securities.
- (f) The Company's allocation policy is dependent on the prevailing market conditions at the time of any proposed issue pursuant to the 10% Placement Facility. The identity of the allottees of Equity Securities will be determined on a case-by-case basis having regard to the factors including but not limited to the following:
 - (i) the methods of raising funds that are available to the Company, including but not limited to, rights issue or other issue in which existing security holders can participate;
 - (ii) the effect of the issue of the Equity Securities on the control of the Company;
 - (iii) the financial situation and solvency of the Company; and
 - (iv) advice from corporate, financial and broking advisers (if applicable).

The allottees under the 10% Placement Facility have not been determined as at the date of this Notice but may include existing substantial Shareholders and/or new Shareholders who are not related parties or associates of a related party of the Company.

Further, if the Company is successful in acquiring new businesses, assets or investments, it is likely that the allottees under the 10% Placement Facility will be the vendors of the new businesses, assets or investments.

(f) A voting exclusion statement is included in the Notice. At the date of this Notice, the Company has not approached any particular existing Shareholder or security holder or an identifiable class of existing security holder to participate in the issue of the Equity Securities. No existing Shareholder's votes will therefore be excluded under the voting exclusion in this Notice.

Equity Issues over the Last 12 Months – Listing Rule 7.3A.6

For the purposes of Listing Rule 7.3A.6(a), the Company advises as follows:

| Number of equity securities on issue at commencement of 12 month period | 1,044,412,042 |
|--|---------------|
| Equity securities issued in the prior 12 month period* | 109,942,943 |
| Percentage of share issues represent of total number of equity securities on issue at commencement of 12 month period | 10.53% |

* For full details of the issues of Equity Securities made by the Company in the previous 12 months, see Appendix 1.

Board Recommendation

The Board unanimously recommends that Shareholders vote in favour of this Resolution. The Chairman of the Meeting intends to vote undirected proxies in favour of this Resolution.

Resolution 8: Approval of the Convertible Loan Facility

(i) Background

As announced by the Company on 15 October 2018, Pala Investments Limited (the "Lender") has agreed to provide A\$5 million in convertible loan financing to the Company (the "Convertible Loan Facility").

The Lender is the Company's cornerstone strategic investor and currently holds 21.50% of the Company's issued share capital.

At the date of this Notice, the Company's existing loan obligations with the Lender comprised a A\$3.5 million facility (plus accrued interest and charges), due and payable on 31 March 2019 ("**Existing Loan Facility**"). The Existing Loan Facility is secured by a first ranking security granted by the Company over all of its assets other than assets which the Company cannot grant security over without the consent of third parties ("**Existing Security**"). The Existing Security was negotiated and entered into prior to the Lender becoming a substantial shareholder of the Company.

Subject to Shareholder approval, the Existing Loan Facility will be rolled into the Convertible Loan Facility. This refinancing will, subject to Shareholder approval, provide up to approximately A\$1 million of additional funding for the Company (which is incremental to the A\$0.5 million already advanced to the Company by Pala after the announcement of the proposed Convertible Loan Facility, bringing the total commitment to A\$5 million) and allow the Lender (at its option) to convert amounts owed by the Company under the Convertible Loan Facility into Shares at a price of A\$0.012 per Share (or A\$0.12 per Share post consolidation if Resolution 5 is approved) on the terms set out in the Convertible Loan Facility. The Convertible Loan Facility will also extend the maturity date from 31 March 2019 to 31 December 2019, or 31 December 2020 if the Company exercises its option to extend further. Under the Existing Security, the Existing Loan Facility and the Convertible Loan Facility, the Lender has the right to request that the Company provide further specific security over its assets and use all reasonable endeavours to obtain all necessary third party consent to the granting of that security.

Given the Company is obtaining the Independent Expert's Report in connection with the shareholder approval for the Convertible Loan Facility, it will use this opportunity to also obtain Shareholder approval for granting a first ranking specific security to the Lender over its 75% shareholding in Atlas Tin SAS ("**Specific Share Security**"). The Company is seeking this shareholder approval at this time, so that it is able to grant the Specific Share Security to the Lender in the future, should:

- the Lender request this security under the Existing Security, Existing Loan Facility or the Convertible Loan Facility; and
- the necessary third party consents and government approvals be obtained (or the requirement to obtain those consents or approvals is waived),

without needing to incur the additional cost and expense of commissioning a further independent expert report and seeking an additional shareholder approval at that time.

If Shareholders do not approve Resolution 8 then the Convertible Loan Facility will not be effective, the commitment under the Existing Loan Facility will not be increased, the Lender will have no right to convert amounts owed to it into Shares, the Company will be required to pay the A\$100,000 structuring fee associated with amending the loan arrangements in cash on 31 January 2019 (rather than the structuring fee being capitalised) and the amounts owed by the Company under the Existing Loan Facility will become due and payable on 31 March 2019. In that case, the Company would need to consider alternative means to raise the funds required to repay the amounts owing under the Existing Loan Facility by 31 March 2019 (which is expected to be A\$4.1 million (including interest and capitalised fees) as at 31 March 2019). If the Company is unable to raise the required funds and repay the amounts owing under the Existing Loan Facility by 31 March 2019, then the Lender will be entitled to enforce its general security interest over the Company's assets (other than its shareholding in Atlas Tin SAS).

The Company is undertaking a share purchase plan (the "**SPP**"), under which eligible shareholders (being shareholders with registered addresses in Australia and New Zealand) can apply for up to A\$15,000 worth of Shares at the issue price of \$0.011 per Share (being the volume weighted average price for the 5 trading days ending 15 November 2018) free of brokerage and transaction costs. The SPP provides the Company's shareholders with the opportunity to increase their shareholding in the Company at a price which reflects current market prices and is below the conversion price under the Convertible Loan Facility. The maximum

number of shares that can be issued under the plan is 313,523,922 and if the Company receives applications for more than that number of shares it will be required to apply a pro-rata scale-back. The SPP is not underwritten and participation in the SPP is optional. As Pala does not have a registered address in Australia or New Zealand, it is not eligible to participate in the SPP.

Proceeds raised through the SPP will be used for general working capital purposes and to fund project development and other activities associated with the Achmmach Tin Project. The directors will also consider the proceeds raised from the SPP in determining how much (if any) of the further approximately A\$1 million available under the Convertible Loan Facility from Pala will be drawn following shareholder approval and whether to repay any of the amounts owing under the Existing Loan Facility in order to reduce the overall amount outstanding under the Convertible Loan Facility.

As the SPP is not underwritten and participation is optional, the SPP is not an alternative to the Convertible Loan Facility (which is committed funding, subject to Resolution 8 being approved). Whilst participation by shareholders in the SPP may raise proceeds that can be used to reduce the amount outstanding under the Convertible Loan Facility, it is unlikely that the SPP will raise sufficient funds to allow the Company to repay the Existing Loan Facility (so that it is not necessary to draw the Convertible Loan Facility.

Therefore, the Board (with Mr Buttenshaw abstaining) recommends that Shareholders vote in favour of Resolution 8 approving the Convertible Loan Facility.

(ii) About the Lender

The Lender is a multi-strategy investment company focused on the mining and metals value chain with a strong track record of successful investments and value creation. The Lender's team has extensive experience within the sector and seeks to assist companies in which it has long-term shareholdings by providing strategic advice and innovative solutions in development, production, expansion and turnaround situations. The Lender also pursues a range of liquid investment strategies. The Lender invests across all geographies and in all mining commodities as well as mining services and consumables.

The Lender has nominated Mr Martyn Buttenshaw as a director of the Company. Mr Buttenshaw is an Advisor of the Lender, and therefore abstains from making a recommendation to Shareholders on Resolution 8.

Further information about the Lender can be found on its website at www.pala.com.

(iii) Use of Funds

The purpose of the Convertible Loan Facility is to extend the maturity date of amounts owed to the Lender (including the amounts currently owed under the Existing Loan Facility) to at least 31 December 2019, to allow repayment in full of the principal amount, accrued interest and capitalised fees owing under the Company's existing loans with the Lender by issue of Conversion Shares (at the Lender's option) and to secure additional proceeds to fund preliminary development expenditure in relation to the Achmmach Tin Project for project financing, engineering and technical optimisation work, and to provide working capital for the Company.

Although the issue of the Conversion Shares would dilute the interest of Shareholders in the Company, it would allow the Company to repay the amounts owed to the Lender under the Convertible Loan Facility other than by cash. This will allow the Company to apply cash which otherwise would have been payable to the Lender to further development of the Achmmach Tin Project.

If Resolution 8 is approved, and the Conversion Shares are not issued, amounts owed to the Lender under the Convertible Loan Facility will be repayable in cash on the maturity date (31 December 2019, extended to 31 December 2020 at the Company's election), requiring the Company to raise further capital (potentially diluting the interests of shareholders) and carries a risk that if the Company is unable to raise the additional capital required by the maturity date then it will be in default under the Convertible Loan Facility, in which case the Lender can exercise its rights under the general security deed to appoint a receiver over the Company's assets.

In particular, if Resolution 8 is not approved by Shareholders, the amounts due under the Existing Loan Facility will become due and payable on 31 March 2019 and should the Company be unable to raise the required capital to repay those amounts by that date it will be in default under the Existing Loan Facility and the Lender may enforce it enforcing its existing general security interest over the Company's assets (other than its shareholding in Atlas Tin SAS) as described above.

(iv) Independent Expert's Opinion

The Company has appointed Sumner Hall Associates Pty Ltd as the Independent Expert to prepare the Independent Expert's Report, the purpose of which is to state whether or not, in its opinion, the issue of Shares under the Convertible Loan Facility to the Lender and granting of the Specific Share Security ("**Proposed Transaction**") is 'fair' and 'reasonable'.

The Independent Expert has concluded that the Proposed Transaction is 'not fair' but it is 'reasonable'.

The Independent Expert concluded that the Proposed Transaction is

- 'not fair' on the basis that the assumed trading range of \$0.010 \$0.015 per Share post completion of the Proposed Transaction adopted by the Independent Expert (which represents the value of a non-controlling interest in the shares of the Company post completion of the Proposed Transaction) is less than the Independent Expert's underlying valuation range of \$0.023 -\$0.038 per share (noting that the maximum voting power which the Lender can acquire under the Convertible Loan Facility is 48.9%);
- "reasonable" based on the Company's current financial situation and limited alternative funding options available to it.

A complete copy of the Independent Expert's Report is provided in Appendix 2 to this Notice. Shareholders are encouraged to read the Independent Expert's Report in its entirety before making a decision on how to vote on Resolution 8.

(v) Summary of the Terms and Conditions of the Convertible Loan Facility

a. Summary of conversion rights

Under the Convertible Loan Facility (and subject to Shareholder approval) the Lender may, subject to shareholder approval being obtained, convert debt owed under the Convertible Loan Facility into shares in the Company.

Following receipt of Shareholder approval, the Lender may exercise this conversion option, subject to a minimum conversion amount of AU\$1,000,000:

- at any time that any "Total Debt" is outstanding and from time to time; or
- on any number of occasions prior to 31 December 2019 ("Maturity Date").

Any amount of the "Total Debt" which has not been converted on or before the Maturity Date must be repaid by the Company. The Company may elect to extend the Maturity Date to 31 December 2020 by giving notice to the Lender and paying an extension fee equal to 2% of the outstanding amount of the Convertible Loan Facility at that time.

Amounts owed under the Convertible Loan Facility accrue interest at the rate of 12% per annum and are payable on the Maturity Date. The interest rate increases to 15% if the Company elects to extend the Maturity Date to 31 December 2020.

The Company is now seeking Shareholder approval under the Corporations Act for the issue of up to 559,003,595 Shares (55,900,360 post consolidation if Resolution 5 is approved) to the Lender upon the conversion of the amounts owed under the Convertible Loan Facility into Shares. This approval covers the maximum number of Shares which could be issued to the Lender upon conversion of all of the amount outstanding under the Convertible Loan Facility, assuming the maximum amount of interest which could be capitalised and added to the "Total Debt" under the terms and conditions of the Convertible Loan Facility and that the Company elects to extend the Maturity Date to 31 December 2020.

The Lender may exercise its conversion option in relation to all or part of the Total Debt (but if in part for an amount of the Total Debt equal to at least AU\$1,000,000).

The Company notes that if Shareholder approval is not granted under Resolution 8 then Convertible Loan Facility will not become effective, the Lender will not have the option to convert amounts owed to it into Shares and the amounts owing under the Existing Loan Facility will be due and payable on 31 March 2019.

The number of shares issued upon conversion is calculated in accordance with the following formula rounded up to the nearest whole share:

Converted Debt / A\$0.012*

*If Resolution 5 is approved, then the denominator in the conversion formula shall be adjusted to A\$0.12 as a result of the share consolidation.

The Conversion Shares will be fully paid and rank equally with the fully paid shares of the Company that are in existence on the date where those shares are converted.

b. Other Key terms

| Security | The security for the loan is over all present and after acquired property of the Company on the terms of the existing General Security Deed between the Company and the Lender dated December 2016. |
|----------|--|
| | The Lender may, at any time, request the Company or any of the Company's subsidiaries, to grant in the Lender's favour a guarantee or additional securities as is reasonable to support or secure the amounts outstanding under the Convertible Loan Facility. This may include granting the Specific Share Security to the Lender, should this be requested by the Lender and the necessary third party consents are obtained. |
| Borrower | Kasbah Resources Limited |

| Lender | Pala Investments Limited |
|--|---|
| Principal Amount | A\$5 million (of which approximately \$3.5 million has been drawn under the Existing Loan Facility as at the date of this Notice of Meeting). |
| Conditions precedent to Convertible Loan Facility | The increase of the Lender's commitment to A\$5 million (in aggregate) available as a single draw and the Lender's right to convert amounts owed under the loan to Shares on the terms and conditions of the Convertible Loan Facility is conditional on the Company obtaining all necessary Shareholder approvals required under the Convertible Loan Facility and customary conditions precedent regarding the execution of the loan documentation and corporate authority to enter into the loan transaction. |
| Interest Rate | 12% per annum (increasing to 15% per annum where the Company elects to extend the Maturity Date to 31 December 2020). |
| Maturity Date | If the conditions precedent to the Convertible Loan Facility (including Shareholders approving the conversion right as contemplated by Resolution 8) are not satisfied by 31 January 2019 or the Company does not draw any additional amounts under the Convertible Loan Facility within 7 days of being available, then the amounts owed by the Company to the Lender under the Existing Loan Facility will become due and payable on 31 March 2019 (in addition to the A\$100,000 structuring fee associated with amending the loan arrangements being payable in cash on 31 January 2019). |
| | If the conditions precedent to the Convertible Loan Facility are satisfied by 31 January 2019, then the amounts owed by the Company to the Lender under the Convertible Loan Facility will become due and payable on 31 December 2019 or, where the Company has elected to extend the Maturity Date, 31 December 2020. |
| Extension Fee | If the Company elects to extend the Maturity Date the Company must pay an extension fee of 2% of the outstanding amount of the Convertible Loan Facility at that time (" Extension Fee "). The Extension Fee will be automatically capitalised if it is not paid in cash by 31 December 2019. |
| Repayment | The Company must repay the entirety of the loan in a single instalment on the Maturity Date unless the Company does not draw any additional amounts under the Convertible Loan Facility within 7 days after satisfaction of the Conditions Precedent to the Convertible Loan Facility, in which case the Lender may elect to cancel the additional commitments under the Convertible Loan Facility and declare all amounts owing under the Convertible Loan Facility due and payable on 31 March 2019. |
| Optional Prepayment | Subject always to the Lender's right to convert prior to the prepayment, the Company may prepay the outstanding amount of the Convertible Loan Facility in whole or in part, provided that: |
| | the Company gives the Lender 14 days' notice; each prepayment is at least equal to the lesser of AU\$1,000,000 or the outstanding amount of the Convertible Loan Facility; and the Company also pays: all accrued interest; and an amount equal to the interest that would have been payable by the Company had the prepaid amount been repaid on the Maturity Date. |
| Conversion | The Lender may convert debt owed under the Convertible Loan Facility into shares in the Company. |
| | Subject to Shareholder approval being obtained, the Lender may exercise its conversion option: |

| | at any time that any Total Debt is outstanding and from time to time; on any number of occasions prior to the Maturity Date; and in relation to all or part of the Total Debt (but if in part for an amount of the Total Debt equal to at least AU\$1,000,000). |
|---|---|
| Conversion Price | A\$0.012 per share ⁷ . |
| Shares Issued Upon Conversion | The number of Shares issued upon conversion is calculated in accordance with the following formula rounded up to the nearest whole share: |
| | Converted Debt / A\$0.012 ⁸ |
| | The Conversion Shares will be fully paid and rank equally with the fully paid shares of the Company on the Conversion Date. |
| Maximum Number of Shares that may be issued on Conversion | 559,003,595, assuming the full balance is drawn on 27 December 2018, the maturity is extended to 31 December 2020 and all interest and fees are capitalised. |
| Lapse of conversion option | The conversion option will lapse on repayment in full of the Company's debt under the Convertible Loan Facility. |
| Escrow of Conversion Shares | Any Conversion Shares issued prior to 30 June 2019 will be escrowed until 30 June 2019 (up to a maximum of 19.99% of the Company's share capital). ⁹ |
| Restrictions on incurring financial indebtedness | The Company must not incur further indebtedness without the Lender's prior written consent. |
| Negative pledge | The Company must not grant any "Liens" (other than "Permitted Liens") without the Lender's prior written consent. |
| Use of funds | The Company must use the additional proceeds under the Convertible Loan Facility to fund payment of project costs and working capital in accordance with the annual budget approved by the Board in form and substance satisfactory to the Lender. Any subsequent amendments to that budget require the prior written consent of the Lender. |
| Other Company undertakings | The Convertible Loan Facility contains customary undertakings in relation to entry in contracts, conduct of the business, reporting to the Lender, compliance with laws (including anti-bribery and corruption laws), distributions to shareholders, lending money to third parties, entering into related party transactions and amending its constituent documents. |
| Events of Default | The Convertible Loan Facility contains customary events of default, including in relation to failure to pay amounts due, cross-defaults, failure to perform covenants, insolvency, change of control and the occurrence of events which have a material adverse effect on the Company's business. |

(vi) Reasons to vote in favour of Resolution 8

The key advantages to the Company if Resolution 8 is approved are:

- the Directors of the Company:
 - consider that the Convertible Loan Facility is the best funding alternative available to the Company to meet its current funding requirements;

⁷ If Resolution 5 is approved, then the conversion price shall be adjusted to A\$0.12 as a result of the share consolidation.

⁸ If Resolution 5 is approved, then the conversion price shall be adjusted to A\$0.12 as a result of the share consolidation.

⁹ To avoid doubt, the escrow does not apply to Pala's current shareholding of 21.5%. The maximum shareholding that Pala can acquire under the Convertible Loan Facility up to 30 June 2019 is 23.7%.

- have endeavoured to identify alternative means of sourcing the necessary funds but were unable to identify any commercially viable alternatives; and
- consider that the Convertible Loan Facility is the most viable means for the Company to secure necessary further funding;
- the maturity date for the Convertible Loan Facility will be extended from 31 March 2019 to at least 31 December 2019 (subject to the satisfaction or waiver of other customary conditions precedent).
- deferring repayment of the amounts due under the Existing Loan Facility (which Kasbah expects will be \$4.1 million by 31 March 2019), which would otherwise be payable on 31 March 2019;
- avoiding the risk of the Company being unable to obtain the funds required to repay the amounts owed under the Existing Loan Facility by 31 March 2019 and the Lender enforcing its existing general security interest over the Company's assets (other than its shareholding in Atlas Tin SAS) should the Company default on that repayment;
- the Company will have access to additional funding which will be used to fund preliminary development expenditure in relation to the Achmmach Tin Project for project financing, engineering and technical optimisation work;
- the Company will have the option to extend the repayment period for amounts owed to the Lender by an additional 12 months (i.e. up to 31 December 2020);
- approval of Resolution 8 will release additional funding of approximately A\$1 million under the Convertible Loan Facility;
- the Lender will be able to convert debt into shares, which may reduce the amount that the Company is required to re-pay to the Lender at the Maturity Date (including capitalised interest);
- should the Lender elect to convert the debt (including capitalised interest) in full, the Company will be able to apply the funds which otherwise would have been required to be repaid to the Lender for other corporate purposes;
- available cash is able to be directed towards growth, working capital requirements and other sources and uses of funds to enhance shareholder value (as opposed to repayment of amounts owed to the Lender);
- the conversion price of \$0.012¹⁰ is above the market price of the Company's shares, being approximately a 32% premium to the Company's 20 day trading VWAP (in the period prior to entry into the Convertible Loan Facility) and a 9.1% premium to the closing price of the Company's shares on 15 November 2018.

(vii) Key risks and disadvantages if Resolution 8 is approved

The key risks and disadvantages to the Company if Resolution 8 is approved are:

- the conversion of the amounts owed under the Convertible Loan Facility is at the Lender's election, such that if the Lender does not exercise its conversion option (noting the Lender is under no obligation to do so) the advantage of not having to repay this debt as outlined above may not be realised;
- the amount of additional capital advanced by Pala under the Convertible Loan Facility is an interim funding measure to seek to place Kasbah in a stronger position to raise the additional capital required to fund its activities in the medium term and ultimately raise the capital required to fund its share of the equity requirements for the Achmmach project debt funding. Shareholders should note that the further equity funding requirements may dilute the interests of current Shareholders in the Company (or the Achmmach project) in the future and there is a risk that Kasbah may be unable to obtain the debt and equity finance required to advance development of the Achmmach project on commercially acceptable terms or at all;
- there will be dilution to the percentage interest of the Company's shareholders (other than the Lender) in the capital of the Company from any conversion of amounts owed under the Convertible Loan Facility;
- if the Lender elects to convert the Convertible Loan Facility in full, it may acquire voting power in the Company of up to 48.9%, which based on historic levels of shareholder participation in general meeting of the Company's shareholders would allow the Lender to determine the outcome of ordinary resolutions of the Company's shareholders (and potentially, special resolutions which require 75% votes cast in favour, depending on the level of shareholder participation). The Lender may also further increase its voting power in other ways permitted by the Corporations Act;
- the issue of Shares to the Lender may result in a decrease in the liquidity of the trading of the Company's shares on ASX, as the Lender's fully diluted equity position may discourage new and existing investors in the Company from acquiring shares in the Company on-market;

 $^{^{10}}$ If Resolution 5 is approved, then the conversion price shall be A\$0.12.

 there is a risk that the Lender's ability to acquire a large shareholding in the Company via conversion of amounts owed under the Convertible Loan Facility may discourage interested parties from making a takeover bid for the Company and consequently the negatively impact the Company's ability to realise a control premium for shares in the Company.

(viii) Approval in relation to Section 611, Item 7 of the Corporations Act

Pursuant to section 606(1) of the Corporations Act, a person must not acquire a relevant interest in issued voting shares in a listed company or an unlisted company with more than 50 shareholders if the person acquiring the interest does so through a transaction in relation to securities entered into by, or on behalf of, the person and because of that transaction, that person's or someone else's voting power increases:

- from 20% or below to more than 20%; or
- from a starting point that is above 20% to below 90%.

The voting power of a person in a body corporate is determined in accordance with section 610 of the Corporations Act.

The calculation of a person's voting power in a company involves determining the voting shares in the company in which the person and the person's Associates have a relevant interest in.

A person has a relevant interest in securities of a company if they individually, or jointly:

- are the holder of the securities;
- have the power to exercise, or control the exercise of, a right to vote attached to the securities; or
- have the power to dispose of, or control the exercise of a power to dispose of, the securities.

Item 7 of section 611 of the Corporations Act provides an exception to the prohibition under section 606 of the Corporations Act. This exception provides that a person may acquire a relevant interest in a company's voting shares if shareholders of the company approve the acquisition.

For the exception in item 7 of section 611 of the Corporations Act to apply, shareholders must be given all information known to the person proposing to make the acquisition or their Associates, or known to the company, that was material to the decision of how to vote on the resolution. In ASIC Regulatory Guide 74, ASIC has indicated what additional information should be provided to shareholders in these circumstances.

Resolution 8 seeks shareholder approval, for the purpose of Item 7 Section 611 of the Corporations Act, to allow the Lender to acquire a relevant interest in Shares upon conversion of the Convertible Loan Facility in circumstances where the voting power of the Lender and its Associates is more than 20% and less than 90% or increase from 20% or below to more than 20%.

The following information is provided in compliance with item 7 of section 611 of the Corporations Act and ASIC Regulatory Guide 74:

a. The identity of the Lender, its Associates and any person who will have a relevant interest in the Shares to be allocated to the Lender or its Associates

The Company has entered into the Convertible Loan Facility with the Lender. Upon the satisfaction of certain conditions (including the approval of Resolution 8) the Lender will have the right to convert the amounts outstanding under the Convertible Loan Facility into Shares. Any Shares issued on the conversion of the Convertible Loan Facility will be issued to the Lender.

The following persons are Associates of the Lender in relation to the Company and will have a relevant interest in any Shares acquired upon conversion:

| Person |
|--------|
|--------|

Associates

Pala Investments Limited (i.e. the Lender)

Pala Group Holdings Limited VFI Holdings AG Vladimir Iorich

The Lender is a multi-strategy investment company focused on the mining and metals value chain with a strong track record of successful investments and value creation. The Lender's team has extensive experience within the sector and seeks to assist companies in which it has long-term shareholdings by providing strategic advice and innovative solutions in development, production, expansion and turnaround situations. The Lender also pursues a range of liquid investment strategies. The Lender invests across all geographies and in all mining commodities as well as mining services and consumables.

Further information about the Lender can be found on its website at www.pala.com.

b. Effect of the Approval on the Company's Capital Structure

The Company's existing capital structure as at the date of this Notice of Meeting is as follows:

| Security type | Number |
|---|---------------|
| Fully paid ordinary shares | 1,045,079,742 |
| Unquoted options (Options exercisable at \$0.033 cents on or before 4 May 2020) | 3,000,000 |
| Unquoted options (Options exercisable at \$0.022 cents on or before 25 July 2020) | 3,000,000 |
| Non-Executive Director Share Rights | 8,827,204 |
| Performance Rights | 96,517,222 |

The number of Shares held by substantial shareholders (including the Lender) and their voting power (expressed as a percentage) as at the date of this Notice of Meeting is as follows:

| Substantial shareholder | Number | Voting power |
|--|-------------|--------------|
| Pala Investments Limited (i.e. the Lender) | 224,721,214 | 21.50% |
| Lion Selection Group Limited | 137,126,074 | 13.12% |

Whilst the Lender has advised the Company that it has no present intention to exercise its conversion right under the Convertible Loan Facility, if the Lender were to exercise its conversion right, the Company's capital structure following the conversion of all amounts owing under the Convertible Loan Facility, assuming:

- the Company elects to extend the "Maturity Date" for the Convertible Loan Facility to 31 December 2020;
- the "Extension Fee" payable in connection with the extension of the "Maturity Date" to 31 December 2020 is capitalised and the interest rate under the Convertible Loan Facility increased from 12% to 15% for the period from 1 January 2020 to 31 December 2020;

• no other issues of Shares are made to any person (including under the SPP),

is shown below.

| Security type | Number |
|---|---------------|
| Fully paid ordinary shares | 1,604,083,337 |
| Unquoted options (Options exercisable at \$0.033 cents on or before 4 May 2020) | 3,000,000 |
| Unquoted options (Options exercisable at \$0.022 cents on or before 25 July 2020) | 3,000,000 |
| Non-Executive Director Share Rights | 8,827,204 |
| Performance Rights | 96,517,222 |

The number of Shares held by substantial shareholders (including the Lender) and their voting power (expressed as a percentage) following the conversion of all amounts owed under the Convertible Loan Facility (based on the assumptions outlined above) and assuming there are no other changes to the shareholding in the Company held by the substantial shareholders or no change to the capital structure of the Company including through a capital raising is as follows:

| Substantial shareholder | Number | Voting power |
|--|-------------|--------------|
| Pala Investments Limited (i.e. the Lender) | 783,724,809 | 48.9% |
| Lion Selection Group Limited | 137,126,074 | 8.5% |

The number of shares and ultimate voting power held by the Lender (and its Associates) depends on a number of factors, such as whether or not interest is capitalised and if Company exercises its option to extend the maturity date. The table below illustrates resulting ownership and voting power of Pala under different circumstances, assuming fees capitalise in all scenarios and no other issues of Shares are made to any person (including under the SPP).

| Scenario | Total of Pala Shares | Voting power | |
|---|----------------------|--------------|--|
| The Lender exercises convertible option immediately after financial close | 649,721,214 | 44.2% | |

| Convertible Loan Facility matures at 31 December 2019 and interest is paid in cash | 649,721,214 | 44.2% |
|--|-------------|-------|
| Convertible Loan Facility matures at 31 December 2019 and interest is capitalised | 701,280,118 | 46.1% |
| Convertible Loan Facility matures at 31 December 2020 and interest is paid in cash | 658,221,214 | 44.5% |
| Convertible Loan Facility matures at 31 December 2020 and interest is capitalised | 783,724,809 | 48.9% |

c. Maximum voting power of the Lender and its Associates following conversion of the Convertible Loan Facility and maximum extent of that increase

Based on the assumptions set out in section 8(viii)(b) above, the maximum voting power of the Lender and its Associates in the Company following the conversion of all amounts owed under the Convertible Loan Facility is 48.9% assuming no other issues of Shares are made to any person (including under the SPP). As the Lender and its Associates presently have voting power in the Company of 21.5%, this would be a maximum increase in voting power of 27.4%.

The Lender may increase its voting power in other ways permitted under the Corporations Act between the date of this Meeting and the Maturity Date (or if extended to 31 December 2020). The Lender at the date of this Notice has not expressed an intention to acquire additional Shares (and is not eligible to participate in the SPP).

d. The identity, qualifications and associations (with the Lender or any of their associates) of any person who is intended to become a director if Shareholders approve Resolution 8.

No person is intended to or will become a director of the Company if Shareholders approve Resolution 8.

For completeness, the Company notes that an existing non-executive director of the Company, Mr Martyn Buttenshaw, is an Advisor to Pala Investments Limited (i.e. the Lender). The Lender also has the right to appoint one additional non-executive director to the Board under the Placement Agreement between the Lender and the Company dated 18 December 2016. Mr Buttenshaw is not an Associate of the Lender or the Pala Associated Entities for the purpose of Resolution 8 and does not have a relevant interest in any Shares held by or issued to the Lender under the Convertible Loan Facility. However, Mr Buttenshaw abstains from making a recommendation to Shareholders on Resolution 8.

e. The Lender's intentions regarding the future of the Company if Shareholders approve Resolution 8 and the Convertible Loan Facility is converted into Shares.

The Lender has provided the Company with the following information to satisfy the requirements of ASIC Regulatory Guide 74. The Company takes no responsibility for the information set out in this section (e) (including any omission, or any error or false or misleading statement in this section (e)).

The Lender has informed the Company that its intentions mentioned in this section are based on the facts and information regarding the Company, its business and the general business environment which are known to the Lender as at the date of the Notice, which is limited to publicly available information. Any future decisions regarding these matters will only be made based on all material information and circumstances at the relevant time. Accordingly, the statements set out below are statements of present intention only which, if circumstances change or new information becomes available in the future, could change accordingly.

The Lender has advised the Company that it has no present intention of:

i. Business of the Company: requesting that the Company change its strategic direction or operational priorities.

- **ii.** Further capital: injecting further capital into the Company.
- iii. Employees: seeking to change the Company's current employee arrangements.
- iv. Transfer of Property: it or its Associates seeking to acquire any of the Company's assets or transferring any of the Lender's (or its Associates) assets to the Company.
- v. Redeployment of fixed assets: redeploying the fixed assets of the Company.

f. Particulars of the terms of the proposed allotments and any contract or proposed contract between the Lender and the Company or any of their Associates which is conditional upon, or directly or indirectly dependent on, Resolution 8 being approved by Shareholders

It is a requirement of the Convertible Loan Facility that the Company seeks the approval sought under Resolution 8. If Resolution 8 it not approved, then the amounts due under the Convertible Loan Facility will become repayable on 31 March 2019 (which the Company estimates will be approximately A\$4.1 million (including interest and capitalised fees)).

Other than the Convertible Loan Facility there are no contracts or proposed contracts between the Noteholders and the Company or any of their Associates which is conditional upon, or directly or indirectly dependent on, Resolution 8 being approved by Shareholders.

g. When the proposed allotment of Shares to the Lender under the Convertible Loan Facility is to occur

Under the terms of the Convertible Loan Facility and subject to shareholder approval being obtained the Lender may convert debt into shares at any time during the term of the loan prior to the "Maturity Date" (being 31 December 2019), unless extended to 31 December 2020 at the Company's election. Further details of the Convertible Loan Facility are set out in Section 8(v) above.

h. Explanation of the reasons for the proposed issue of the Convertible Loan Facility to the Lender and the resultant issue of Shares to the Lender on conversion of the Convertible Loan Facility

The Convertible Loan Facility was entered into to:

- extend the "Maturity Date" for amounts currently owed by the Lender from 31 December 2018 to 31 March 2019 (with this interim extension not conditional on shareholder approval being obtained for Resolution 8) and which will be further extended to at least 31 December 2019, with the Company's having the option to extend to 31 December 2020, should Resolution 8 be approved;
- ii. provide additional funding (being A\$5 million less amounts previously advanced by the Lender) should Resolution 8 be approved by Shareholders, which will be used to fund preliminary development expenditure in relation to the Achmmach Tin Project for project financing, engineering and technical optimisation work, and to provide working capital;
- iii. to allow the amounts to the Lender to be repaid other than by way of cash (at the Lender's election).

The Directors of the Company consider that the Convertible Loan Facility is in the best interests of the Company given its current funding requirements. The Directors of the Company have endeavoured to identify alternative means of sourcing the necessary funds but were unable to identify any commercially viable alternatives and consider that the Convertible Loan Facility is the most viable means for the Company to secure necessary further funding.

In particular, as the SPP is not underwritten and participation is optional, the SPP is not an alternative to the Convertible Loan Facility (which is committed funding, subject to Resolution 8 being approved). Whilst participation by shareholders in the SPP may raise proceeds that can be used to reduce the amount outstanding under the Convertible Loan Facility, it is unlikely that the SPP will raise sufficient funds to allow the Company to repay the Existing Loan Facility (so that it is not necessary to draw the Convertible Loan Facility).

i. Interests of the Directors in Resolution 8

None of the current Board members have a material personal interest in the outcome of Resolution 8 other than their interests arising solely in their capacity as Shareholders of the Company (to the extent they hold Shares).

Mr Buttenshaw is an Advisor of the Lender, but does not have a material personal interest in the outcome of Resolution 8. However, Mr Buttenshaw abstains from making a recommendation to Shareholders on Resolution 8.

j. Intentions of the Lender to change significantly the financial or dividend policies of the Company

The Lender has advised the Company that it has no present intention of seeking to change the financial or dividend policies of the Company.

k. Analysis of whether the issue of the Shares to the Lender is fair and reasonable when considered in the context of the interests of Shareholders other than the Lender

The Company has appointed the Independent Expert to prepare the Independent Expert Report, the purpose of which is to state whether or not, in the Independent Expert's opinion, the Proposed Transaction is 'fair' and 'reasonable'.

The Independent Expert has concluded that the Proposed Transaction is 'not fair' but it is 'reasonable'.

A copy of the Independent Expert Report is attached as Appendix 2 to this Notice of Meeting and is also available from the Company's website at www.kasbashresources.com. Shareholders are encouraged to read the Independent Expert's Report in its entirety before making a decision on how to vote on Resolution 8.

(ix) Approval in relation to ASX Listing Rule 10.1

ASX Listing Rule 10.1 provides that a company must not "dispose" of a "substantial asset" to a "substantial holder" without shareholder approval being obtained. The Company's 75% shareholding in Atlas Tin SAS, is a "substantial asset" for the purpose of this provision, as its value is more than 5% of the Company's equity interests as set out in its latest financial statements. For the purpose of this rule, "dispose" includes using an asset as collateral or security in the context of a loan.

The specified persons or entities to whom ASX Listing Rule 10.1 applies includes a "substantial holder" in the entity who either alone or together with its Associates has a Relevant Interest, or had a Relevant Interest at any time in the six months before the transaction, of at least 10% of the votes attached to the entity's shares.

Given the Lender's current 21.50% shareholding in the Company, it and its Associates are "substantial holders" for the purpose of ASX Listing Rule 10.1.

Under ASX Listing Rule 10.1 the Notice of Meeting must include a report from an independent expert as to whether the granting of the Specific Share Security is fair and reasonable to Shareholders (other than the Lender and its Associates).

The Independent Expert has concluded that the Proposed Transaction is 'not fair' but 'reasonable'.

The Independent Expert also noted that the approval for the Specific Share Security, in anticipation of any request by the Lender for an enhanced security position in relation to the Company's shares in Atlas Tin SAS, has a neutral impact on Shareholders because the Lender already ranks in priority to Shareholders in any administration or winding up of the Company that would involve a disposal of the company's 75% shareholding in Atlas Tin SAS.

A copy of the Independent Expert Report is attached as Appendix 2 to this Notice of Meeting and is also available from the Company's website at www.kasbashresources.com. Shareholders are encouraged to read the Independent Expert's Report in its entirety before making a decision on how to vote on Resolution 8.

Board Recommendation

The Board currently comprises the following Directors:

• Mr John Gooding – Chairman (Non-Executive)

- Mr Graham Freestone Director (Non-Executive)
- Mr Graham Ehm Director (Non-Executive)
- Mr Martyn Buttenshaw Director (Non-Executive)

The Board (with Mr Buttenshaw abstaining) recommends that Shareholders vote in favour of Resolution 8 and Mr Gooding, Mr Freestone and Mr Ehm intend to vote (in their capacity as Shareholders) in favour of Resolution 8, in the absence of a superior proposal.

As Mr Buttenshaw is an Advisor to the Lender, Mr Buttenshaw declines to make a recommendation in relation to Resolution 8.

The reasons why the Directors (other than Mr Buttenshaw) recommend Shareholders vote in favour of Resolution 8 are set out in Section 8(vi) of this Notice of Meeting and in the Chairman's Letter included in this Notice of Meeting.

The Directors are not aware of any other information other than as set out in this Notice that would be reasonably required by Shareholders to allow them to make a decision whether it is in the best interests of the Company to pass Resolution 8.

Resolution 9: Approval of Potential Termination Benefits

Under section 200B of the Corporations Act, the Company must not give a person a benefit in connection with the person's retirement from an office, or position of employment, in a Company if:

- the office or position is a managerial or executive office; or
- the person has, at any time during the last three years before their retirement, held a managerial or executive office in a Company,

unless shareholder approval is obtained under section 200E of the Corporations Act for the giving of the benefit (or if a specified exception applies).

If a termination benefit is given in excess of what is permitted under the Corporations Act, a breach of the Corporations Act can occur even if the person receiving the benefit is entitled to the benefit under their contractual arrangements with a Company.

Having regard to the potentially wide application of the restriction under section 200B of the Corporations Act, the Board considers it to be appropriate and prudent to seek Shareholder approval under sections 200B and 200E of the Corporations Act, so that termination benefits may be paid or provided to relevant persons according to their contractual arrangements without breaching the Corporations Act.

In addition, Listing Rule 10.19 provides that, without the approval of shareholders, an entity must ensure that no officer of the entity or any of its child entities will be, or may be, entitled to termination benefits if the value of those benefits and the termination benefits that may become payable to all officers together exceed 5% of the equity interests of the entity as set out in the latest accounts given to ASX under the Listing Rules.

The Company is also seeking Shareholder approval for the purposes of Listing Rule 10.19.

Who does the approval relate to?

Shareholder approval is being sought in respect of any current or future Director or employee of the Company or any related body corporate who is a Relevant Executive on the day of his or her retirement from office or employment. For these purposes, retirement includes loss of, or resignation from, an office or position and death of a person on a day when they hold the office or position.

A person is a Relevant Executive on any day if:

- they hold a managerial or executive office on that day; or
- at any time during the three years prior to that day, they held a managerial or executive office in the Company or a related body corporate.

As at the date of this Explanatory Statement, the Relevant Executives include:

- each of the Key Management Personnel of the Company as disclosed in the Company's Remuneration Report; and
- any other person who holds a managerial or executive officer in the Company or its subsidiaries.

Resolution 9 seeks Shareholder approval for the purposes of section 200E of the Corporations Act, for the persons who are Relevant Executives as at the date of this Explanatory Statement, and for any other current or future Director or employee who, at the time of his or her termination or at any time in the three years prior to that date, was a Key Management Personnel of the Company or held a managerial or executive office in the Company.

Shareholder approval will not result in any Relevant Executive immediately receiving any termination benefits that may be payable to them. Rather the approval seeks to preserve the flexibility and discretion of the Board to the determine the most appropriate treatment on termination of any potential termination benefits payable in accordance with employment agreements, applicable incentive plan rules and Company policies, within the confines of this approval.

Approval of Resolution 9 will not constitute:

- approval of any change or increase in the remuneration arrangement of the Relevant Executive outside the Company's remuneration framework;
- approval of the provision of any new benefits to any specific Relevant Executive;
- approval of any variation of the existing discretion of the Board or its delegates under the remuneration arrangements set out in the Remuneration Report; or
- approval of any change to the employment arrangements, agreements or entitlements for any Relevant Executive.
Shareholder approval is also sought for the purposes of Listing Rule 10.19 in relation to the value of termination benefits (if any) exceeding 5% of the equity interests of the Company. As at 30 June 2018, 5% of the equity interests in the Company equated to \$246,500. Further details are set out below.

What is the Company seeking approval for?

Termination benefits are defined to include a range of payments or benefits in connection with a person ceasing to hold an office or position of employment, including termination payments and other benefits such as the acceleration or automatic vesting of share-based payments or entitlements at or due to retirement.

Certain benefits are excluded from the restrictions and include:

- certain types of 'deferred bonuses', including a bonus which is attributable to the release of a deferred bonus from a restriction due to death or incapacity;
- genuine superannuation contributions paid by an employer or employee on or after 24 November 2009;
- genuine accrued benefits, such as accrued untaken annual leave payable under an Australian law or the law of another country; and
- reasonable payments made in accordance with a policy that applies to all employees as a result of a genuine redundancy having regard to a person's length of service.

There is an exception to the prohibition of certain termination benefits where the value of all termination benefits provided in specified circumstances does not exceed the equivalent of one year's base salary (as calculated in accordance with the Corporations Act) of the Relevant Executive although this limit is lower if the Relevant Executive's period of service is less than one year.

The provision of any other benefit requires shareholder approval.

Shareholder approval is sought for the purposes of Section 200B and 200E of the Corporations Act for termination benefits that may be provided to Relevant Executives under the following agreements or plans:

- individual employment agreements or services contract (Employment Agreements);
- any Employee Incentive Plan ("EIP") (including the Company's Long Term Incentive Plan);
- insurance policies; and
- other practices and policies described in Appendix 3.

Further information about potential termination benefits is set out in Appendix 3.

For the purposes of seeking approval under the Corporations Act, shareholders must be provided with:

- details of the amount or value of the payment or benefit; or
- where the amount or value cannot be determined at the time of the disclosure:
- the manner in which the amount or value of the benefit is to be calculated; and
- any matter, event or circumstance that will, or is likely to affect the calculation of the amount or value.

The Board's discretion to make a payment or give a benefit on termination is intended for circumstances of death, disability, bona fide redundancy, genuine retirement, or other limited exceptional circumstances where the Board considers it in the best interests of the Company to give the termination benefit.

Shareholder approval is also sought for the purposes of Listing Rule 10.19. The value of any termination benefit payable to a Relevant Executive depends on a number of factors, including the exercise of a discretion (for example, acceleration of vesting of securities) and the value of the Company's equity interests which vary over time. Accordingly, it is possible the provision of a termination benefit could exceed 5% of the equity interests of the Company at the relevant time of provision of the termination benefit.

What is the value of the potential termination benefit?

Under section 200E(2) of the Corporations Act, when seeking shareholder approval of a termination benefit shareholders must be given details of the amount or value of the proposed payment or benefit or if that amount or value cannot be ascertained at the time of disclosure, the manner in which that amount or value is to be calculated and any matter, event or circumstance that will, or is likely to, affect the calculation of that amount or value. This value is also relevant in determining whether the termination benefit exceeds the 5% equity interests threshold imposed by Listing Rule 10.19.

The amount and value of the termination benefits that may be provided to each Relevant Executive cannot be ascertained in advance. This is because various matters, events and circumstances (including the manner in which the individual retires from their role, the length of time they have been in their role and the exercise of discretions by the Board or committee of the Board), some of which are not within the Company's control, will or are likely to affect the calculation of the amount or value.

Appendix 3 sets out the manner in which the amount or value of the potential termination benefits is intended to be calculated, and the matters, events and circumstances that will affect the calculation of that amount or value.

Shareholder approval is being sought to allow the provision of all benefits under the Company's remuneration framework which may be defined as termination benefits for the purposes of the Corporations Act and which are set out in this Explanatory Statement. The Company's remuneration practices and arrangements could potentially result in a Relevant Executive receiving a benefit upon termination, cessation of employment or retirement from office with the Company.

Therefore, the amount and value of the benefits for which shareholder approval is being sought under Resolution 9 is the maximum amount or value of the benefit that could be provided to the Relevant Executive in connection with that person ceasing to hold an office, or position of employment, in the Company or a related body corporate.

Approval is sought for a three-year period

If approval of Resolution 9 is obtained, it will be effective from the date of the Meeting until the date which is three years from the date of the Meeting. This means that the approval will apply in respect of any termination of a Relevant Executive during that period. If considered appropriate, the Board will seek a new approval from Shareholders following expiration of the validity of the approval sought under Resolution 9.

Aspects of the Employment Agreements, EIP and other employment practices and policies may be varied from time to time by the Company in line with market practice, changing governance standards and needs of the Company and its subsidiaries. Where relevant, these changes will be reported in the Company's Remuneration Report. However, it is intended that the approval set out in Resolution 9 will remain valid despite such variation, as long as the termination benefits continue to be within the scope of benefits set out in this Explanatory Statement.

Effect of the approval

If Shareholder approval is given to Resolution 9, the Company will be able to provide termination benefits to Relevant Executives up to the maximum scope, amount and value described in this Explanatory Statement (including in Appendices 3 and 4). In particular, the Board (or relevant Board committee) will be able to exercise the discretions described in Appendix 3.

If approved by Shareholders, termination benefits as provided for in this Explanatory Statement may be given to current or future Relevant Executives, and under existing, varied or new arrangements.

Shareholder approval to Resolution 9 will also:

- enable the Company to remunerate Relevant Executives and generally operate a remuneration framework in a way that the Board considers is in the interests of the Company, within the scope set out in this Explanatory Statement (including, in particular, Appendices 3 and 4); and
- increase certainty for staff regarding their current and future remuneration arrangements.

If Resolution 9 is not passed, the ability of the Company to attract and retain high quality staff may be affected. This may also reduce the Company's ability to align the interests of staff and Shareholders.

Board Recommendation

The Board abstains in the interests of corporate governance, from making a recommendation in relation to this Resolution.

GLOSSARY

The following terms have the following meanings in this Explanatory Statement:

"\$" means Australian Dollars;

"10% Placement Facility" has the meaning as defined in the Explanatory Statement for Resolution 7;

"10% Placement Period" has the meaning as defined in the Explanatory Statement for Resolution 7;

"Annual Report" means the Directors' Report, the Financial Report, and Auditor's Report, in respect to the year ended 30 June 2018;

"Achmmach Tin Project" means the Achmmach tin mine located in El Hajeb province in northern Morocco;

"Associates" has the meaning given to that term in sections 11 and 13 to 17 (inclusive) of the Corporations Act;

"ASX" means ASX Limited ABN 98 008 624 691 or the Australian Securities Exchange, as the context requires;

"Auditor's Report" means the auditor's report on the Financial Report;

"AEDT" means Australian Eastern Daylight Time.

"Board" means the Directors acting as the board of Directors of the Company;

"Chairman" means the person appointed to chair the Meeting of the Company convened by the Notice;

"Closely Related Party" means:

- (a) a spouse or child of the member; or
- (b) has the meaning given in section 9 of the Corporations Act.

"Company or Kasbah" means Kasbah Resources Limited ACN 116 931 705;

"Constitution" means the constitution of the Company as at the date of the Meeting;

"**Converted Debt**" means the debt under the Convertible Loan Facility to be converted into shares in the Company in accordance with the terms of the Convertible Loan Facility;

"**Conversion Shares**" means the shares issued upon conversion of any debt under the Convertible Loan Facility into equity in the Company in accordance with the terms of the Pala Loan Facility;

"**Convertible Loan Facility**" means the Loan Agreement between the Company and the Lender dated 15 October 2018 on the terms described in the section of the Explanatory Statement dealing with Resolution 8 and which is conditional on the passing of Resolution 8;

"Convertible Loan Facility Terms" means the terms of the Convertible Loan Facility;

"Corporations Act" means the Corporations Act 2001 (Cth);

"Director" means a Director of the Company;

"**Directors Report**" means the annual directors' report prepared under Chapter 2M of the Corporations Act for the Company and its controlled entities;

"Equity Security" has the same meaning as in the Listing Rules;

"Existing Loan Facility" means the Loan Agreement dated 10 August 2016 between the Company and the Lender, as amended on 18 December 2016, 31 October 2017, 2 May 2018 and 15 October 2018;

"Existing Security" means the security granted by the Company in favour of the Lender pursuant to the General Security Deed dated on or about December 2016.

"Explanatory Statement" means the explanatory statement which forms part of the Notice;

"Financial Report" means the annual financial report prepared under Chapter 2M of the Corporations Act for the Company and its controlled entities;

"Independent Expert" means Sumner Hall Associates Pty Ltd;

"Independent Expert's Report" means the report prepared by the Independent Expert set out at Appendix 3 to this Notice.

"Key Management Personnel" means persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly, including any Director (whether executive or otherwise) of the Company;

"Listing Rules" means the Listing Rules of the ASX;

"Lender or Pala" means Pala Investments Limited, the lender under the Convertible Loan Facility;

"Meeting" has the meaning given in the introductory paragraph of the Notice;

"Notice" means this Notice of Meeting including the Explanatory Statement;

"Pala" means Pala Investments Limited.

"Pala Associated Entities" means Pala Group Holdings Limited, VFI Holdings AG and Vladimir Iorich.

"Proposed Transaction" has the meaning given in the Explanatory Statement, Resolution 8, Section (iv));

"Proxy Form" means the proxy form attached to the Notice;

"Relevant Interest" has the meaning given to that term in the Corporations Act.

"**Remuneration Report**" means the remuneration report which forms part of the Directors' Report of the Company for the financial year ended 30 June 2018 and which is set out in the 2018 Annual Report;

"Resolution" means a resolution referred to in the Notice;

"Share" means a fully paid ordinary share in the capital of the Company;

"Shareholder" means shareholder of the Company;

"SPP" means the offer by the Company to eligible shareholders to acquire up to A\$15,000 of Shares at an issue price of \$0.011 per Share under a share purchase plan, as announced by the Company on the date of this Notice.

"**Total Debt**" means the amount of the debt under the Convertible Loan Facility and any associated interest and fees payable to the Lender;

"Trading Day" means a day determined by ASX to be a trading day in accordance with the Listing Rules;

"Voting Power" has the meaning given to that term in the Corporations Act; and

"VWAP" means volume weighted average price.

Appendix 1

NON-CASH ISSUES

| Date | Number of Securities | Security Type | Terms | Description | Party or Basis | Price | Discount | Total Consideration | Use of Consideration |
|--------------------|-------------------------|-----------------------------------|---|--|---|-----------------------------------|----------|--------------------------------------|---|
| 7 Dec 2017 | 43,396,224 | Unlisted Performance Rights | Subject to service and performance conditions | Employee Performance Rights | Senior Executives | Deemed Issue Price \$0.0159 | N/A | Deemed Consideration \$690,000 | Granted to Senior Executives under the Plan as approved by shareholders at the Company's Annual General Meeting held 24 November 2017 |
| 7 Dec 2017 | 7,075,470 | Unlisted Share Rights | Subject to service conditions | Non-Executive Director Share Rights | Mr John Gooding, Mr Stephen Gill, Mr Graham Freestone | Deemed Issue Price \$0.0159 | N/A | Deemed Consideration \$112,500 | Granted to Directors as approved by shareholders at the Company's Annual General Meeting held 24 November 2017 |
| 6 Feb 2018 | 667,700 | Fully Paid Ordinary Shares | Fully paid ordinary shares | Share Issue | Mr Stephen Gill | Nil | N/A | Deemed Consideration \$12,018 | Shares issued pursuant to the terms of the Non-Executive Director Share Rights Plan as approved by shareholders at the Company's Annual General Meeting held 24 November 2017 |
| 6 Feb 2018 | 2,808,988 | Unlisted Share Rights | Subject to service conditions | Non-Executive Director Share Rights | Mr Martyn Buttenshaw | Deemed Issue Price \$0.0178 | N/A | Deemed Consideration \$50,000 | Granted to Directors as approved by shareholders at the Company's Annual General Meeting held 24 November 2017 |
| 14 Feb 2018 | 2,873,563 | Unlisted Share Rights | Subject to service conditions | Non-Executive Director Share Rights | Mr Graham Ehm | Deemed Issue Price \$0.0174 | N/A | Deemed Consideration \$50,000 | Granted to Directors as approved by shareholders at the Company's Annual General Meeting held 24 November 2017 |
| 8 November 2018 | 53,120,998 | Unlisted Performance Rights | Subject to service and performance conditions | Employee Performance Rights | Senior Executives | Deemed Issue Price \$0.014 | N/A | Deemed Consideration \$743,964 | Granted to Senior Executives as approved by shareholders at the Company's Annual General Meeting held 24 November 2017 |
| | | | | | | | Total | \$1,658,212 | |

Appendix 2

Independent Expert's Report

The Independent Expert has concluded that the Proposed Transaction is not fair but is reasonable.

19 November 2018

The Directors Kasbah Resources Limited Level 13 459 Collins Street Melbourne Victoria 3000

Dear Sirs,

SUMNER HALL ASSOCIATES PTY LTD

ABN 72 074 140 177 AFS LICENCE NO. 231214

48 Darling Point Road Darling Point NSW 2027 Australia

Phone Email Web

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Independent Expert's Report -Proposed Transaction with Pala Investments Limited

1 Introduction

The Directors of Kasbah Resources Limited ("Kasbah Resources") announced on 15 October 2018 that:

- a \$3.0 million shareholder loan from Pala Investments Limited ("Pala Investments") with a maturity date of 31 December 2018 would be increased immediately by \$0.5 million and the maturity date for the full principal amount of \$3.5 million (together with accrued interest of an additional amount of approximately \$0.4 million) would be extended to 31 March 2019; and
- they would seek approval from Kasbah Resources shareholders for a proposal pursuant to which the shareholder loan from Pala Investments would be increased by a further amount of approximately \$1.0 million¹, the maturity date for the full amount of \$5.1 million (including accrued interest and fees) would be extended to 31 December 2019² and the loan would be restructured as a convertible loan that Pala Investments could convert to additional new shares in Kasbah Resources at a conversion price of 1.2¢ per share.

Approval is also sought from Kasbah Resources shareholders for granting a first ranking specific security to Pala Investments over Kasbah Resources' 75% interest in the shares of Atlas Tin SAS ("Atlas Tin"), the joint venture company that owns the Achmmach Tin Project. Under the existing shareholder loan from Pala Investments, Kasbah Resources has an obligation to grant a first ranking specific security over its shareholding in Atlas Tin to Pala Investments subject to, inter alia, Kasbah Resources receiving a request from Pala Investments to include that shareholding in Pala Investments' security package and the other shareholders in Atlas Tin consenting to Kasbah Resources granting security over those shares to Pala Investments. As at the date of this report, neither of those conditions had been satisfied. However, Kasbah Resources is seeking shareholder approval to grant this security together with shareholder approval of the proposal for the Pala Investments convertible loan in order to avoid the cost and expense of holding a separate shareholder meeting at some future date in the event that such security is requested by Pala Investments and the other conditions are met.

Accordingly, the proposal to make changes to the shareholder loan from Pala Investments and approval for the granting of a specific security to Pala Investments over Kasbah Resources' 75% interest in the shares of Atlas Tin have been treated as a single transaction ("the Proposed Transaction).

The Directors of Kasbah Resources have also decided that Kasbah Resources will undertake a share purchase plan ("the SPP") to raise up to \$3.4 million through the issue of up to \$15,000 worth of shares to each eligible shareholder (being shareholders with registered addresses in Australia and New Zealand) at a price of 1.1¢ per share (being the volume weighted average price of Kasbah Resources shares over the five days up to 15

¹ The shareholder loan can be increased to a maximum of \$5.1 million including the pre-existing principal amount of \$3.5 million, accrued interest of approximately \$0.5 million, new funding of approximately \$1.0 million and an arrangement fee of approximately \$0.1 million.

² Kasbah Resources would have an option to extend the maturity date by a further 12 months to 31 December 2020. An additional arrangement fee and a higher interest rate would apply if that option were to be exercised.

November 2018). The SPP is not underwritten and participation in the SPP is optional. The maximum number of shares that can be issued under the SPP is 313,523,922 shares and if applications are received for more than that number of shares then each application will be scaled back on a pro rata basis. Proceeds raised through the SPP will be used for general working capital purposes and to fund project development and other activities associated with the Achmmach Tin Project. The Directors of Kasbah Resources will also consider the proceeds raised through the SPP to determine how much of the further amount of approximately \$1.0 million that will be available from the Pala Investments shareholder loan (if the Proposed Transaction is approved) will be drawn and whether to repay any of the existing amount of the Pala Investments shareholder loan. The SPP is not conditional on shareholder approval for the Proposed Transaction and will proceed irrespective of whether shareholders approve the Proposed Transaction.

Pala Investments is a Switzerland based private equity investment company that focuses on investments in the mining industry and, in particular, mining ventures that are in the development stage or that have not yet reached a mature level of production. Pala Investments is the controlling shareholder of Asian Mineral Resources Limited ("Asian Mineral Resources"), a Canadian company that is listed on the TSX Ventures exchange, who was the proposed merger partner for Kasbah Resources in August 2016. Following the rejection of the scheme of arrangement³ for that proposed merger, Pala Investments took up a 19.9% shareholding in Kasbah Resources in December 2016 through a private placement of new shares in Kasbah Resources at 2.7ϕ per share. Pala Investments increased its shareholding from 19.9% to 21.5% by taking up shares as part of the non-renounceable rights issue that was made by Kasbah Resources in July 2017 at 1.5¢ per share⁴.

If the Proposed Transaction is approved by Kasbah Resources shareholders, and assuming that all available funds are drawn down and that all interest and fees are capitalised⁵, conversion of the full amount by Pala Investments would result in Pala Investments increasing its current shareholding of 21.5% of Kasbah Resources to:

- 44.2% in the event that Pala Investments were to convert the loan into shares immediately upon completion of the Proposed Transaction;
- 46.1% in the event that Kasbah Resources does not exercise its option to extend the maturity date to 31
 December 2020 and the loan is converted into shares on 31 December 2019; and
- 48.9% in the event that Kasbah Resources exercises its option to extend the maturity date to 31 December 2020 and the loan is converted into shares on 31 December 2020.

If the Proposed Transaction is not approved, or if that approval has not been obtained by 31 January 2019, all amounts owing to Pala Investments under the existing loan arrangements (including the additional drawdown of \$0.5 million that was announced on 15 October 2018) will be due and payable on 31 March 2019.

Shareholder approval for the Proposed Transaction, including approval for the potential conversion of the convertible loan into additional new shares in Kasbah Resources and approval, in anticipation, of a request from Pala Investments for an enhanced loan security in relation to the company's shares in Atlas Tin, is being sought in accordance with item 7 of section 611 of the Corporations Act ("item 7 of s611") and chapter 10, subchapter 10.1, of the ASX Listing Rules ("Listing Rule 10.1"). The Directors of Kasbah Resources have requested that Sumner Hall Associates Pty Ltd ("Sumner Hall") prepare an independent expert's report setting out Sumner Hall's opinion as to whether the Proposed Transaction is fair and reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments. Sumner Hall is independent of Kasbah Resources and has no other involvement with, or interest in the outcome of, the Proposed Transaction. This report has been prepared to assist the Directors of Kasbah Resources in making their recommendations to shareholders in relation to the Proposed Transaction.

A copy of this report is to be included in the Notice of Meeting to be sent to Kasbah Resources shareholders.

³ Kasbah Resources shareholders voted in favour of the scheme of arrangement but it was subsequently rejected by the Court.

⁴ Pala Investments took up its entitlement to the institutional portion of the rights issue in July 2017 and also subscribed for additional shares as an underwriter to the retail portion of the rights issue in August 2017.

⁵ To the extent that Kasbah Resources issues new shares as a result of the SPP and to the extent that the proceeds are applied to repayment of amounts owing to Pala Investments, these amounts would be reduced and the potential percentage shareholdings of Pala Investments in Kasbah Resources would also be reduced accordingly.

2 Summary and Conclusions

In Sumner Hall's opinion, the Proposed Transaction is not fair but it is reasonable, in the absence of a superior proposal, having regard to the interests of Kasbah Resources shareholders other than Pala Investments.

- 3 -

Sumner Hall has valued 100% of the shares in Kasbah Resources (assuming that 100% of the shares were freely available for acquisition by a hypothetical, willing but not anxious purchaser) in the range 2.3-3.8¢ per share. For the purpose of takeover style analysis, the value of the consideration for Kasbah Resources shareholders is considered to be the price at which Kasbah Resources shares are expected to trade following completion of the Proposed Transaction. While any judgment in this regard is by its very nature subject to considerable uncertainty, Sumner Hall has adopted for the purposes of this analysis a post completion Kasbah Resources share price in the range 1.0-1.5¢ (refer to Section 6.3 of this report for further detail). This assumed trading range of 1.0-1.5¢ for Kasbah Resources shares (which represents the value of a non-controlling interest in the shares of Kasbah Resources post completion of the Proposed Transaction) is less than the underlying value for 100% of the Kasbah Resources in the range 2.3-3.8¢ per share prior to completion of the Proposed Transaction and, accordingly, the Proposed Transaction is not fair.

The more important issue for Kasbah Resources shareholders is whether they will be better off if they vote in favour of the Proposed Transaction than if they reject it. Sumner Hall has had regard to the following factors in considering whether the Proposed Transaction might be reasonable even though it is not fair:

- the allotment of shares to Pala Investments is to be made at a premium of 50% to the Kasbah Resources share price immediately prior to the announcement of the Proposed Transaction and a premium of 26% to the weighted average share price over the preceding 30 days, both of which are at or above the typical range of premiums observed in control transactions⁶;
- in the absence of the Proposed Transaction or some alternative funding arrangement, Kasbah Resources will not have sufficient resources to continue to participate in the funding and development of the Achmmach Tin Project or to continue to pay its creditors as and when they fall due;
- the most likely alternative to the Proposed Transaction would be a substantial rights issue that would almost certainly be at a discount to the current share price and possibly a large discount with the result that the non-associated shareholders of Kasbah Resources would be diluted to a greater extent than would occur pursuant to the Proposed Transaction;
- in the absence of the Proposed Transaction, or a superior proposal, there would be an appreciable risk that Kasbah Resources would be placed into some form of administration on the basis that an alternative capital raising could not be completed on a timely basis or that some other alternative funding proposal would not eventuate; and
- the approval, in anticipation, of an enhanced security position for Pala Investments in relation to the company's shares in Atlas Tin has a neutral impact on Kasbah Resources shareholders because Pala Investments already ranks in priority to shareholders in any administration or winding up of Kasbah Resources that would involve a disposal of the company's 75% shareholding in Atlas Tin.

In Sumner Hall's view, the disadvantages of the Proposed Transaction are outweighed by the benefits of the Proposed Transaction. Completion of the Proposed Transaction will mean that the exposure of Kasbah Resources shareholders to the value of the Achmmach Tin Project will be diluted. However, that dilution is likely to be less than it would be in the absence of the Proposed Transaction, or a superior proposal, in which case Kasbah Resources would have to seek additional capital from another source. Completion of the Proposed Transaction will also mean that the likelihood of an alternative offer for control of Kasbah Resources will be reduced because Pala Investments will have the right to increase its voting power from 21.5% to as high as 48.9% of the shares in Kasbah Resources. However, it would still be possible for another party to seek to acquire control of Kasbah Resources and, in any event, the opportunity to put forward an alternative proposal will remain until the meeting to consider the Proposed Transaction is held and the Directors of Kasbah Resources would consider any such proposal on its merits if and when it arose.

⁶ The allotment price is at a premium of only 3% to the weighted average share price in the four months since the announcement of the revised Definitive Feasibility Study results but the Kasbah Resources share price has declined significantly since that time.

The Proposed Transaction is not, however, a complete solution to Kasbah Resources' short term funding requirements. Kasbah Resources will receive additional cash from the Proposed Transaction that will support its requirements to fund its share of the development costs for the Achmmach Tin Project and other corporate overhead costs until March 2019. However, some additional funding is likely to be required at that time (subject to the amount raised from the SPP) in order to continue to fund development costs up to the point where debt funding for the Achmmach Tin Project has been finalised. The Proposed Transaction will place Kasbah Resources in a stronger position to raise that additional capital and, eventually, to raise its share of the equity funding for the project on better terms either through a further significant capital raising or a selldown of an interest in the project.

Taking all of these factors into account, Sumner Hall has concluded that the Proposed Transaction is reasonable even though it is not fair.

An expanded summary of the reasons for Sumner Hall's opinion is set out below:

Sumner Hall's valuation of Kasbah Resources is summarised below:

• Sumner Hall has valued Kasbah Resources in the range 2.3-3.8¢ per share.

| Kasbah Resources – Valuation Summary (| \$ millions) | | | |
|--|-------------------------------|--------------|--|--|
| | Valuation Range (\$ millions) | | | |
| | Low | High | | |
| Achmmach Tin Project (75% interest) | 39.6 | 55.5 | | |
| Mineral exploration assets | 0.1 | 0.6 | | |
| Total mineral assets | 39.7 | 56.1 | | |
| Cash ⁷ (including notional cash from exercise of options) | 0.2 | 0.3 | | |
| Capitalised future corporate overheads | (10.9) | (10.9) | | |
| Enterprise value | 29.0 | 45.5 | | |
| Pala Investments loan (including accrued interest to 31 December 2018) | 4.0 | 4.0 | | |
| Net value of Kasbah Resources | 25.0 | 41.5 | | |
| Shares on issue ⁸ (millions) | 1,100.303 | 1,103.303 | | |
| Net value per share | 2.3¢ | 3.8 ¢ | | |

Kasbah Resources has been valued by aggregating the estimated fair market value of the company's individual mineral assets (and the cash and corporate overhead costs necessary to progress the development of those assets). This value is appropriate for the acquisition of Kasbah Resources as a whole and, accordingly, incorporates a premium for control. A value determined on this basis would usually exceed the price at which shares will trade on the sharemarket in the absence of a takeover offer or other proposal involving a change in control and assuming that the market is fully informed.

Differing approaches have been adopted in relation to valuing each of the mineral assets of Kasbah Resources:

- the fair market value for a 75% interest in the Achmmach Tin Project has been assessed on the basis of a discounted cash flow valuation based on the 2018 Definitive Feasibility Study and lifeof-mine plan including an allowance for development risk commensurate with the remaining development milestones; and
- the other mineral exploration assets have been assessed on the basis of a technical specialist's assessment of exploration asset values.

Other assets and liabilities have been valued based on estimated net realisable value.

⁷ This figure includes the impact of actual cash receipts and cash disbursements from 30 June 2018 to 30 September 2018 and projected cash disbursements through 31 December 2018.

⁸ This figure includes shares that would be issued from the vesting of performance rights and non-executive director share rights and from the exercise of in-the-money options based on the net value per share.

Based on the valuation approach that is described briefly above and set out in detail in the valuation section of this report, Sumner Hall has valued 100% of Kasbah Resources in the range \$25.0-41.5 million which represents 2.3-3.8¢ per share.

Based on recent market practice, the regulatory framework is that the relevant consideration for the Proposed Transaction, in terms of fairness, should be taken to be the price at which Kasbah Resources shares are expected to trade following completion of the Proposed Transaction rather than the allotment price that determines the degree of dilution that will occur. In this context, it is critical for Kasbah Resources shareholders to understand that any judgments regarding future sharemarket trading prices are inherently subject to considerable uncertainty and volatility.

For the purpose of this analysis, Sumner Hall has adopted a share price of $1.0-1.5 \notin$ as being a likely trading price range for Kasbah Resources shares in the short term post completion of the Proposed Transaction and in the absence of the announcement of any significant corporate activity or other material price sensitive information (refer to Section 6.3 of this report for further detail).

This assumed trading range of 1.0-1.5¢ for Kasbah Resources shares (which represents the value of a non-controlling interest in the shares of Kasbah Resources post completion of the Proposed Transaction) is less than the underlying value for 100% of the Kasbah Resources in the range 2.3-3.8¢ per share prior to completion of the Proposed Transaction and, accordingly, the Proposed Transaction is not fair.

Additional factors have been considered in determining whether the Proposed Transaction is reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments.

A transaction that is fair is also, by definition (in terms of Regulatory Guide 111), reasonable. However, in this case the Proposed Transaction is not fair and it is therefore necessary to consider other factors to determine whether the Proposed Transaction is reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments.

The price of 1.2ϕ at which new shares in Kasbah Resources will be allotted to Pala Investments upon conversion of the convertible loan represents a premium of 50% over the last trading price for Kasbah Resources shares of 0.8ϕ immediately prior to the announcement of the Proposed Transaction. The allotment price represents a premium of 26% to the weighted average share price of 0.95ϕ over the preceding 30 days but a premium of only 3% to the weighted average share price of 1.17ϕ over the four months since the announcement of the revised Definitive Feasibility Study results in July 2018.

The one day and 30 day weighted average premiums are consistent with, or well above in the case of the one day premium, the level of premiums that are generally observed in takeovers and schemes of arrangement in the Australian market that tend to be in the range 25-35% compared to the pre-offer share trading price⁹. However, it is important to recognise that:

- takeover premiums are observed outcomes rather than determinants of value;
- pre-offer share prices can sometimes reflect speculation regarding takeovers, other corporate activity or other unusual factors;
- takeover premiums often include some portion of special value for synergies as well as a premium for control; and
- takeover premiums vary widely depending on individual circumstances including many instances where the takeover premium is well below or well above the 25-35% range that is often cited as the typical range.

By contrast, the premium of 3% over the longer period (of approximately four months) since the announcement of the revised Definitive Feasibility Study results in July 2018 is low. This reflects the fact that the Kasbah Resources share price has declined significantly since that time. The reasons for this are likely to include uncertainties associated with the Achmmach Tin Project regarding the



⁹ Refer, for example, to the Control Premium Study 2017 by RSM Australia Pty Ltd and the KPMG Valuation Practices Survey 2017.

likelihood of funding, construction and operation in line with the Definitive Feasibility Study and lifeof-mine plan as well as uncertainties that are associated with mining operations generally including, in this case, expected future US\$ tin prices.

Kasbah Resources had cash resources of approximately \$1.5 million as at 30 September 2018. The company's expected cash flow requirements to fund its share of development costs for the Achmmach Tin Project and other corporate overhead costs in the period to 31 December 2018 were in excess of this cash balance. In addition, prior to the announcement of the Proposed Transaction, the full amount of the shareholders loan from Pala Investments (which was approximately \$3.5 million including accrued interest up to the maturity date) was due for repayment on 31 December 2018.

In the absence of the Proposed Transaction or some alternative funding arrangement, Kasbah Resources would not have been able to meet its commitments or pay its debts as and when they fell due.

Kasbah Resources received a cash injection of \$0.5 million from Pala Investments subsequent to the announcement of the Proposed Transaction. The maturity date for the shareholder loan was also extended from 31 December 2018 to 31 March 2019. If the Proposed Transaction is approved, there will be a further cash injection of approximately \$1.0 million from Pala Investments and a further extension of the maturity date of the shareholder loan to 31 December 2019. This will remove any short term requirement to repay or refinance the shareholder loan (and, if converted to shares, any such requirement will cease to exist). This will also provide Kasbah Resources with sufficient cash to meet its commitments to fund its share of the development costs for the Achmmach Tin Project and other corporate overhead costs until March 2019. Beyond that date, some additional funding is likely to be required (subject to the amount raised from the SPP) in order to continue to fund development costs up to the point where debt funding for the Achmmach Tin Project has been finalised. The Proposed Transaction will, however, place Kasbah Resources in a stronger position to raise that additional capital and, eventually, to raise its share of the equity funding for the project on better terms either through a further significant capital raising or a selldown of an interest in the project.

If the Proposed Transaction is not approved, and in the absence of some alternative funding arrangement, Kasbah Resources would again be in the position of not being able to meet its commitments or pay its debts as and when they fell due. Kasbah Resources would require additional funds by January 2019 to meet its ongoing commitments regarding the Achmmach Tin Project and corporate overhead costs and it would also require an amount of approximately \$4.1 million to repay the Pala Investments loan when it fell due on 31 March 2019.

Kasbah Resources shares traded in the range 0.8-1.0¢ during the 30 days prior to the announcement of the Proposed Transaction. The shares have traded in the range 0.6-1.1¢ since that announcement. In the event that the Proposed Transaction is not approved and Kasbah Resources was to remain listed, the company will require a significant amount of additional cash to continue to fund the development of the Achmmach Tin Project and to repay the shareholder loan from Pala Investments. The potential dilution from a significant capital raising to fund those activities would place downward pressure on the Kasbah Resources share price. In the absence of the Proposed Transaction or some alternative funding arrangement (or some other material price sensitive information), Sumner Hall expects that Kasbah Resources shares will continue to trade below the proposed allotment price of 1.2¢ per share that is contemplated in the Proposed Transaction, at least in the short term.

In the event that the Proposed Transaction does not proceed, Kasbah Resources will face the need to raise a significant amount of capital in a short period of time (with some of these funds required urgently and the remainder by 31 March 2019). Any such capital raising would almost certainly be at a discount to the current share price and possibly a large discount with the result that the non-associated shareholders of Kasbah Resources would be diluted to a much greater extent than would occur pursuant to the Proposed Transaction.

In the absence of the Proposed Transaction, or a superior proposal, there would be an appreciable risk that Kasbah Resources would be placed into some form of administration on the basis that an alternative capital raising could not be completed on a timely basis or that some other alternative funding proposal would not eventuate. This would almost certainly be the worst outcome in terms of shareholder value.

The Proposed Transaction includes a provision that the shareholders of Kasbah Resources approve, in anticipation, the granting of a first ranking security over the shares in Atlas Tin to Pala Investments in the event that Pala Investments requests that Kasbah Resources seek consent to the granting of that

security from the other shareholders of Atlas Tin. In those circumstances, Pala Investments would become a secured creditor with respect to the shares in Atlas Tin rather than maintaining its current position as an unsecured creditor with respect to those shares. This would improve the position of Pala Investments vis-à-vis any other unsecured creditors of Kasbah Resources. However, this would not change the position of Pala Investments vis-à-vis the shareholders of Kasbah Resources because Pala Investments would continue to rank in priority to shareholders in any administration or winding up of Kasbah Resources that involved a disposal of the company's 75% shareholding in Atlas Tin.

Completion of the Proposed Transaction will mean that the likelihood of an alternative offer for control of Kasbah Resources will be reduced because Pala Investments will have the right to increase its voting power from 21.5% to as high as 48.9% of the shares in Kasbah Resources. However, it would still be possible for another party to seek to acquire control of Kasbah Resources and, in any event, the opportunity to put forward an alternative proposal will remain until the meeting to consider the Proposed Transaction is held and the Directors of Kasbah Resources would consider any such proposal on its merits if and when it arose.

Kasbah Resources shareholders should also consider certain other matters when making a decision in relation to the Proposed Transaction.

Sumner Hall's opinion has been formed on the basis of business conditions specific to Kasbah Resources and other general economic and market conditions that applied during the weeks leading up to the date of this report.

Sumner Hall has been engaged to prepare an independent expert's report setting out its opinion as to whether the Proposed Transaction is fair and reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments. Sumner Hall has not been engaged to provide a recommendation to Kasbah Resources shareholders in relation to the Proposed Transaction. Responsibility for a recommendation in relation to the Proposed Transaction rests with the Directors of Kasbah Resources.

In any event, approval or rejection of the Proposed Transaction is ultimately a matter for individual shareholders based on each shareholder's views as to the value of Kasbah Resources, expectations about future market conditions and their particular circumstances including risk profile, liquidity preference, investment strategy, portfolio structure and tax position. Kasbah Resources shareholders who are in any doubt as to the action that they should take in relation to the Proposed Transaction should consult their own professional adviser.

Sumner Hall has prepared a Financial Services Guide as required by the Corporations Act. Sumner Hall's Financial Services Guide is included as Annexure D to this report.

3 Scope of the Report

3.1 **Purpose of the Report**

The Proposed Transaction is subject to the approval of Kasbah Resources shareholders pursuant to item 7 of section 611 of the Corporations Act ("item 7 of s611") because it will result in Pala Investments holding convertible notes in Kasbah Resources that, if converted, would increase the voting power of Pala Investments from 21.5% to as high as 48.9% of the shares in Kasbah Resources. Section 606 of the Corporations Act prohibits a person from acquiring an interest in a public listed company where that person's voting power would increase from 20% or below to more than 20% or, if that person already has voting power of more than 20%, from increasing that voting power further, except in a limited number of prescribed ways. One of those ways is provided for in item 7 of s611 whereby shareholders can waive the prohibition by passing a resolution to that effect in general meeting.

Regulatory Guide 74 (Acquisitions approved by members), published by the Australian Securities & Investments Commission ("ASIC"), sets out the guidelines for meetings that are held pursuant to item 7 of s611. An explanatory statement (in this case, the Notice of Meeting) must be sent to shareholders explaining the effect of the proposal and setting out such information as is prescribed and any other information that is material to the making of a decision by a shareholder as to whether or not to agree to the proposed transaction. Shareholders are to be provided with a detailed analysis of the proposal. There is no requirement in the Corporations Act for an independent expert's report to be included as part of the explanatory statement but standard market practice is for an analysis of the proposed transaction to be provided in the form of an independent expert's report rather than the directors of the company preparing such a report themselves.

The Proposed Transaction is also subject to the approval of Kasbah Resources shareholders pursuant to chapter 10, subchapter 10.1, of the ASX Listing Rules ("Listing Rule 10.1"). Listing Rule 10.1 prohibits a listed company from acquiring or disposing of assets worth more than 5% of its net assets in a transaction with a substantial holder or related party without the approval of the non-associated shareholders. The Proposed Transaction is subject to the provisions of Listing Rule 10.1 because the granting of security over the company's shares in Atlas Tin is regarded by the ASX as a disposal of a significant asset and because Pala Investments is a substantial holder of shares in Kasbah Resources as defined in Listing Rule 10.1¹⁰. Chapter 10, subchapter 10.10 of the ASX Listing Rules ("Listing Rule 10.10") requires an independent expert's report to be included as part of the notice of meeting to shareholders for a proposal that is subject to shareholder approval under Listing Rule 10.1.

Sumner Hall is independent of Kasbah Resources and has no other involvement with, or interest in, the outcome of the Proposed Transaction. A copy of this report is to be despatched to Kasbah Resources shareholders along with the Notice of Meeting issued by Kasbah Resources. This report has been prepared by Sumner Hall to assist the Directors of Kasbah Resources in making their recommendation to shareholders. The sole purpose of this report is an expression of Sumner Hall's opinion as to whether the Proposed Transaction is fair and reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments. This report should not be used for any other purpose or by any other party. To the extent that this report is used by any party other than the Directors of Kasbah Resources, this report would constitute general financial product advice only and has been prepared without taking into account the objectives, financial situation or needs of individual shareholders in Kasbah Resources. Shareholders should consider the appropriateness of the advice having regard to their own objectives, financial situation or needs before acting in relation to their holdings. Shareholders should read the Notice of Meeting issued by Kasbah Resources in relation to the Proposed Transaction.

3.2 Basis of the Evaluation

Regulatory Guide 111 (<u>Content of expert reports</u>) sets out the principles and matters that ASIC expects an independent expert to take into account when preparing a report for various purposes including a proposal pursuant to item 7 of s611. Proposals that are subject to item 7 of s611 can encompass a wide variety of transaction types. Accordingly, Regulatory Guide 111 differentiates between the analysis that should apply to transactions involving a change in control of a company and other transactions.

¹⁰ Listing Rule 10.1 defines a "substantial holder" as a person with a relevant interest of at least 10% of the voting power in the entity.

In the context of control transactions (whether by takeover bid, scheme of arrangement or some other means), the expert is required to determine whether the transaction is "*fair*" and whether it is "*reasonable*" as discrete concepts. For a takeover offer, fairness involves a comparison of the offer price with the value that can be attributed to the securities that are the subject of the offer based on the value of the underlying businesses and assets. Any existing entitlement to securities by the offeror is to be ignored and the value is to be determined on the basis that 100% ownership of the company is available. Reasonableness, by contrast, involves an analysis of factors other than the relationship between price and value that shareholders might consider in determining whether to accept or reject a proposal including:

- the offeror's shareholding and other significant shareholdings;
- the likelihood of an alternative offer;
- other alternatives that might be available to the company; and
- the liquidity of the market for the company's shares.

Fairness is a more demanding criterion than reasonableness. A proposal that is "*fair*" will also always be "*fair and reasonable*" (both logically and by definition, according to Regulatory Guide 111) but a proposal that is "*reasonable*" may not necessarily be "*fair*". A proposal might be considered reasonable, even if it was not fair, provided that there were valid reasons to accept the offer notwithstanding that the offer price was less than the value of the underlying businesses and assets. For example, an offer price that is in excess of pre-existing market prices but less than full value will not be fair but may be reasonable if shareholders are otherwise unlikely to realise an amount for their shares in excess of the offer price in the foreseeable future.

In this case, the Proposed Transaction involves the potential issue of shares in Kasbah Resources to Pala Investments with the effect that Pala Investments interest in Kasbah Resources could increase above its current level of 21.5%. Accordingly, Sumner Hall has evaluated the Proposed Transaction as a control transaction and formed an opinion as to whether the Proposed Transaction is fair and reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments.

While the Proposed Transaction is considered a control transaction, it is not a takeover offer in the conventional sense. The Proposed Transaction does not involve the making of any offer or the direct provision of any consideration to Kasbah Resources shareholders by Pala Investments. Following completion of the Proposed Transaction, Kasbah Resources shareholders will continue to hold shares in Kasbah Resources although the value and likely trading price of those shares will be affected by the terms of the Proposed Transaction. Given that Pala Investments will not provide any consideration directly to Kasbah Resources shareholders, application of takeover analysis to the Proposed Transaction is problematic. Based on recent market practice, the regulatory framework is that the consideration for the Proposed Transaction should be taken to be the likely trading price for shares in Kasbah Resources post completion of the Proposed Transaction. Conceptually, this approach assumes that Kasbah Resources shareholders will be surrendering the opportunity to realise full underlying value for their shares (ie, a value including a control premium). In this context, fairness from the perspective of Kasbah Resources shareholders requires that they are compensated by an increase in the trading price of Kasbah Resources shares such that the trading price immediately after the completion of the Proposed Transaction matches or exceeds the full underlying value of Kasbah Resources prior to the Proposed Transaction.

In considering whether the Proposed Transaction is reasonable, the factors that have been considered include:

- Kasbah Resources' current financial position and its requirement for additional capital;
- the extent to which the Proposed Transaction is likely to improve Kasbah Resources' financial position;
- the potential dilution of the interests of existing shareholders caused by the Proposed Transaction;
- the impact of the Proposed Transaction on control of Kasbah Resources;

- the potential consequences if the Proposed Transaction is not approved by shareholders; and
- any other benefits and disadvantages of the Proposed Transaction.

Listing Rule 10.10 stipulates that the notice of meeting for a transaction that is subject to shareholder approval under Listing Rule 10.1 must include an independent expert's report and that the independent expert's report must state whether the transaction is "fair and reasonable". For the purpose of this report, Sumner Hall has interpreted "fair and reasonable" pursuant to Listing Rule 10.10 to have the same meaning as "fair and reasonable" pursuant to Regulatory Guide 111 because the Proposed Transaction is comprised of an interrelated and indivisible set of terms and conditions that Kasbah Resources shareholders must consider as a whole.

3.3 Sources of Information

During the course of preparing this report, Sumner Hall held discussions with, and received information from, senior management of Kasbah Resources and its advisors. In preparing this report, Sumner Hall has utilised and relied upon, without independent verification, the following information:

- the terms of the amended loan facility agreement between Kasbah Resources and Pala Investments Pty Ltd in relation to the Proposed Transaction;
- a draft Notice of Meeting in relation to the Proposed Transaction dated 30 October 2018;
- the Annual Reports of Kasbah Resources for the years ended 30 June 2018, 30 June 2017 and 30 June 2016;
- press releases, stock exchange announcements and other public filings by Kasbah Resources;
- other confidential or non public documents including market research studies, project feasibility studies, financial planning models and strategic plans related to the business operations of Kasbah Resources; and
- annual reports, stock exchange announcements, investor and analysts' presentations, brokers' analysts reports and press clippings on publicly listed tin mining and development companies and transactions involving acquisitions of interests in tin projects and related sharemarket data.

This report has also been prepared having regard to the principles set out in the Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets ("the Valmin Code"), 2015 Edition, to the extent practical and appropriate. AMC Consultants Pty Ltd ("AMC") was appointed as an independent technical specialist to review the mineral assets of Kasbah Resources. AMC's role included a review of the geological resource, life-of-mine plan, production schedule, mining and mineral processing techniques, capital costs and operating costs for the Achmmach Tin Project. AMC also reviewed the geological resources for Kasbah Resources' other mineral assets and prepared valuations of those other mineral assets on an exploration basis. Summer Hall has considered and relied upon AMC's report. A copy of AMC's report is included as Annexure C to this report.

3.4 Limitations and Reliance on Information

Sumner Hall's opinion is based on economic, financial market, business trading and other conditions and expectations prevailing at the date of this report. These conditions can change significantly over relatively short periods of time and, if they did change materially, the valuations and opinions expressed in this report could be different.

This report is also based upon financial and other information provided by Kasbah Resources. Sumner Hall has considered and relied upon this information. Sumner Hall has no reason to believe that any material facts have been withheld. The information provided to Sumner Hall has been evaluated through analysis, enquiry and review for the purposes of forming an opinion as to whether the Proposed Transaction is fair and reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments. However, Sumner Hall does not warrant that its enquiries have identified or verified all of the matters that an audit, extensive examination or "due diligence" investigation might disclose. Sumner Hall has made what it considers to be appropriate enquiries for the purpose of forming its opinion but due diligence of the type undertaken by companies and their advisers in relation

to prospectuses, profit forecasts and acquisitions is beyond the scope of an independent expert's report. Accordingly, this report and Sumner Hall's opinion as to whether the Proposed Transaction is fair and reasonable should be considered more in the nature of an overall review rather than a comprehensive audit or detailed investigation.

An important part of the information used in forming an opinion of the kind expressed in this report is comprised of the opinions and judgment of management. This type of information was also evaluated through analysis, enquiry and review to the extent practical. However, such information is not always capable of external verification or validation.

The information provided to Sumner Hall and AMC included feasibility studies, life-of-mine plans, closure plans, forecasts of future production, revenues, expenditures, profits and cash flows. Kasbah Resources is responsible for this information. Sumner Hall and AMC have assumed that any forward looking information was prepared appropriately and accurately based on the information available to management at the time and within the practical constraints and limitations of such forward looking information. It has been assumed that this information does not reflect any material bias, either positive or negative. Based on the enquiries that have been made, Sumner Hall and AMC have no reason to believe otherwise. However, neither Sumner Hall nor AMC in any way guarantee or otherwise warrant the achievability of the outcomes contemplated in the forward looking information. This type of information is inherently uncertain. This information represents predictions of future events that cannot be assured and are necessarily based on assumptions, many of which are beyond the control of the company and its management. Actual results may be significantly more or less favourable.

Preparation of this report does not imply that Sumner Hall has audited in any way the management accounts or other books and records of Kasbah Resources. It is understood that the accounting information that was provided to Sumner Hall was prepared in accordance with Australian equivalents to International Financial Reporting Standards and in a manner consistent with the method of accounting in previous years unless otherwise noted.

In forming its opinion, Sumner Hall has also relied on representations from the management of Kasbah Resources that matters such as title and compliance with laws and regulations are in good standing and will remain so and that there are no material adverse legal proceedings. To the extent that there are legal issues or issues relating to compliance with applicable laws, regulations and policies, Sumner Hall assumes no responsibility and offers no legal opinion or interpretation.

Sumner Hall believes that this report and the opinions included in it must be considered as a whole and that selecting portions of the analysis, without considering all of the factors and analysis together, could create a misleading view of the process underlying the opinion. The preparation of a report of this nature is a complex process and is not necessarily susceptible to partial analysis or summary.

4 **Profile of Kasbah Resources**

4.1 Overview of the Company

Kasbah Resources was incorporated as Kasbah Resources Pty Ltd in October 2005 before converting to a public company and listing on the ASX as Kasbah Resources Limited in April 2007. The original purpose of the company was to establish a successful Moroccan focused exploration and mining business and the Achmmach Tin Project has been the company's primary focus since listing.

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The Achmmach Tin Project is located in northern Morocco as shown below:



The Achmmach Tin Project is held through a joint venture company, Atlas Tin SAS ("Atlas Tin") that has three shareholders:

- 75% held by Kasbah Resources;
- 20% held by Toyota Tsusho Corporation ("Toyota Tsusho"); and
- 5% held by Nittetsu Mining Co. Ltd ("Nittetsu").

Kasbah Resources held 100% of the Achmmach Tin Project until 2012 when Toyota Tsusho commenced a series of payments totalling approximately \$17 million that entitled Toyota Tsusho to earn a 20% interest in the project. Toyota Tsusho is the trading arm of the Toyota Motor Corporation group and has interests in a variety of industries including minerals and metals.

Nittetsu acquired a 5% interest in the project in 2013 for approximately \$7 million. Nittetsu is listed on the Tokyo Stock Exchange and has a variety of interests including trading in minerals and metals.

In addition to being responsible (collectively) for 25% of the development costs of the Achmmach Tin Project, Toyota Tsusho and Nittetsu are entitled to take their proportionate share of the tin concentrate from the project (on mutually agreed commercial terms) as offtake partners¹¹.

Other key terms of the shareholder's agreement for Atlas Tin, the joint venture company, include the following:

¹¹ This entitlement is set out in the Atlas Tin shareholder's agreement between Kasbah Resources, Toyota Tsusho and Nittetsu.

- each shareholder must exercise its voting power in such a way as to promote the Achmmach Tin Project and the interests of the joint venture; and
- an 80% shareholder vote is required to approve certain matters including any corporate restructuring activity or carrying out any type of business other than the Achmmach Tin Project.

Kasbah Resources and Atlas Tin have conducted extensive exploration and drilling of the tin deposit that underpins the Achmmach Tin Project and a number of feasibility studies have been carried out. The Definitive Feasibility Study that was completed in July 2018 is based on a 10 year life-of-mine plan for a 750,000 tonne per annum underground ore mining operation. The downstream processing operation has been downsized (compared to previous feasibility studies) by introducing ore sorting procedures prior to concentrate processing. The processing operation is now based on throughput of approximately 520,000 tonnes of ore per annum to produce tin concentrate in the range of 8-9,000 tonnes per annum (depending on the tin grade for ore from different parts of the mine).

Subject to completion of project financing in early to mid 2019, the Achmmach Tin Project will have a construction period of approximately 15-20 months with first tin concentrate production planned for late 2020.

A detailed description of the Achmmach Tin Project is set out in the Independent Technical Specialist's Report that is included as Annexure C to this report.

The other assets of Kasbah Resources consist of:

- cash and cash equivalents (for use primarily in development of the Achmmach Tin Project); and
- various mineral assets at the exploration stage including 100% ownership of the Bou El Jaj Tin Project and 100% ownership of the Tamlalt Gold Project (both located in Morocco).

4.2 Historical Operating Results for Kasbah Resources

The historical operating results of Kasbah Resources for the three years ended 30 June 2018 are summarised below:

| Kasbah Resources – Historical Operating Performance (\$000s) | | | | | | |
|--|--------------------|-------------------|-------------------|--|--|--|
| | Year ended 30 June | | | | | |
| | 2016 (audited) | 2017 (audited) | 2018 (audited) | | | |
| Exploration and evaluation expenses | 1,501 | 995 | 2,095 | | | |
| Moroccan non-recoverable VAT costs | 251 | 167 | 563 | | | |
| Project financing expenses | - | 8 | 177 | | | |
| Gross profit (loss) related to mineral projects | (1,752) | (1,170) | (2,835) | | | |
| Corporate office and administrative costs | 1,490 | 2,597 | 3,432 | | | |
| EBITDA (loss) relating to mineral projects | (3,242) | (3,767) | (6,267) | | | |
| Depreciation and amortisation | 221 | 111 | 45 | | | |
| EBIT (loss) | (3,463) | (3,878) | (6,312) | | | |
| Costs relating to 2016 scheme of arrangement | - | 1,246 | (56) | | | |
| Other expense (income) | (1) | - | - | | | |
| Total profit (loss) before interest and tax | (3,462) | (5,124) | (6,256) | | | |
| Net interest expense (income) | (51) | 81 | 88 | | | |
| Net profit (loss) before tax | (3,411) | (5,205) | (6,344) | | | |
| Income tax expense | - | - | - | | | |
| Net profit (loss) after tax | (3,411) | (5,205) | (6,344) | | | |

Kasbah Resources has no operating revenue and essentially all of its operating costs relate to the development of the Achmmach Tin Project whether directly as part of the project development costs in

Morocco or indirectly through corporate overheads for the Perth and Melbourne offices of the company. Total costs relating to the development of the project and other corporate overhead costs were in the order of \$3-4 million for 2016 and 2017. Those costs increased to approximately \$6 million for 2018 due principally to the preparation and completion of the 2018 Definitive Feasibility Study. The company also incurred costs of approximately \$1.2 million relating to the failed 2016 scheme of arrangement.

4.3 Kasbah Resources' Financial Position

The audited balance sheets of Kasbah Resources as at 30 June 2016, 30 June 2017 and 30 June 2018 are summarised below:

| Kasbah Resources – Balance | Sheets (\$000s) | | |
|---|-------------------|-------------------|-------------------------|
| | | | |
| | 2016 (audited) | 2017 (audited) | 2018 (audited) |
| Cash and cash equivalents | 1,171 | 1,723 | 3,017 |
| Receivables and prepayments | 154 | 256 | 337 |
| Acquisition cost for permits - Achmmach Tin Project ¹² | 5,525 | 5,447 | 5,720 |
| Acquisition cost for permits - Bou El Jaj Tin Project ¹³ | 92 | 90 | 95 |
| Tamlalt Gold Project ¹⁴ | - | - | - |
| Fixed assets | 152 | 38 | 41 |
| Total assets | 7,094 | 7,554 | 9,210 |
| Creditors and accrued expenses | 812 | 1,606 | 1,070 |
| Pala Investments loan (including accrued interest) | - | 1,077 | 3,210 |
| Total liabilities | 812 | 2,683 | 4,280 |
| Net assets | 6,282 | 4,871 | 4,930 |
| Shares on issue (000s) | 556.005 | 694.139 | 1,097.303 ¹⁵ |
| Net assets per share | 1.1¢ | 0.7 ¢ | 0.5¢ |

There has been little change in the company's assets during the past few years. The Achmmach Tin Project and the Bou El Jaj Tin Project are carried on the balance sheet at the historical cost of acquiring the exploration permits. Ongoing exploration and development expenditure is being expensed. The Tamlalt Gold Project has been written down to \$1 on the basis that there are no plans to develop the asset in the foreseeable future.

The remainder of the balance sheet reflects the funding requirements for development of the Achmmach Tin Project. Cash requirements have been funded by a combination of the shareholder's loan from Pala Investments (originally for \$1.0 million and increased to \$3.0 million¹⁶ during 2018) and two capital raisings:

- \$3.7 million was raised through a placement of 138,133,684 shares (to Pala Investments) in December 2016 at 2.7¢ per share; and
- \$5.2 million was raised through a non-renounceable rights issue of 347,069,747 shares in August 2017 at 1.5¢ per share.

¹² This is the historical cost for the permits for the Achmmach Tin Project in Moroccan dirham. The difference in this figure from year to year represents movements in the exchange rate. Ongoing exploration and evaluation expenditure is written off as an expense in the year incurred.

¹³ This is the historical cost for the permits for the Bou El Jaj Tin Project in Moroccan dirham. The difference in this figure from year to year represents movements in the exchange rate. Ongoing exploration and evaluation expenditure is written off as an expense in the year incurred.

¹⁴ The carrying value of this asset has been written down to \$1 which rounds to zero in this table.

¹⁵ This figure includes unvested performance rights and non-executive director share rights over 52,223,428 shares as at 30 June 2018. This represents approximately 4.8% of the notional expanded number of shares on issue.

¹⁶ These are the principal amounts of the loan. The balance sheet figures also include accrued interest and fees.

Net assets per share has declined from 1.1ϕ per share in 2016 to 0.5ϕ per share as at 30 June 2018 as a result of funding operating losses over and above the impact of the issue of new shares at a premium to net assets.

Kasbah Resources disclosed a future income tax benefit from carryforward tax losses of \$9.6 million as at 30 June 2018. However, this deferred tax asset was not recognised in the balance sheet due to the uncertainty of timing in relation to when taxable profits might be generated.

4.4 Capital Structure and Shareholders of Kasbah Resources

Kasbah Resources had the following securities on issue as at 9 October 2018:

- 1,045,079,742 fully paid ordinary shares that are listed and trading on the ASX;
- 43,396,224 conditional performance rights to receive fully paid ordinary shares;
- 8,827,204 non-executive director share rights; and
- options to acquire 6,000,000 fully paid ordinary shares.

The major shareholders in Kasbah Resources as at 9 October 2018 are set out below:

| Kasbah Resources – Major Shareholders | | |
|--|-----------------------------------|------------------------|
| | Number of Fully Paid Shares | Percentage of Total |
| Pala Investments | 224,721,214 | 21.5% |
| Lion Selection Group Limited | 137,126,074 | 13.1% |
| HSBC Custody Nominees (Australia) Limited | 50,032,965 ¹⁷ | 4.8% |
| Braham Consolidated Pty Ltd | 39,828,794 | 3.8% |
| Thailand Smelting & Refining Co, Ltd ("Thaisarco") | 31,197,990 | 3.0% |
| Mr Petr Turcovsky | 17,000,000 | 1.6% |
| JP Morgan Nominees Australia Limited | 16,867,057 | 1.6% |
| Swiss Partners Pty Ltd | 14,840,015 | 1.4% |
| Braham Investments Pty Ltd | 11,332,617 | 1.1% |
| Subtotal – major shareholders | 542,946,726 | 51.9% |
| Other shareholders with less than 1.0% (approximately 1,700 holders) | 502,133,016 | 48.1% |
| Grand total | 1,045,079,742 | 100.0% |

Pala Investments is the largest shareholder in Kasbah Resources with a 21.5% interest. Pala Investments is also the controlling shareholder of Asian Mineral Resources (a Canadian company that is listed on the TSX Ventures exchange) who was the proposed merger partner for Kasbah Resources in August 2016. Following the rejection of the scheme of arrangement for that proposed merger, Pala Investments took up a 19.9% shareholding in Kasbah Resources in December 2016 through a private placement of new shares in Kasbah Resources at 2.7ϕ per share. Pala Investments increased its shareholding from 19.9% to 21.5% by taking up shares as part of the non-renounceable rights issue that was made by Kasbah Resources in July 2017 at 1.5¢ per share¹⁸.

Over half of the company's shares are held by the top ten shareholders (although two of those shareholders, HSBS Custody Nominees (Australia) Limited and JP Morgan Nominees Australia Limited, are institutional shareholders who are likely to hold shares on behalf of a variety of smaller

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¹⁷ This shareholding includes 44,375,205 shares (representing a 4.3% shareholding) that are beneficially owned by Traxys group ("Traxys").

¹⁸ This change in ownership percentage took place in two separate but related steps. Pala Investments took up its entitlement to the institutional portion of the rights issue in July 2017 and also subscribed for additional shares as an underwriter to the retail portion of the rights issue in August 2017.

shareholders). Two of the top ten shareholders, Traxys and Thaisarco, are minerals and metals trading companies who are likely to hold an interest in the company on the basis of establishing a customer relationship for offtake from the Achmmach Tin Project.

The remainder of the share register is widely held with over 1,700 relatively small shareholdings.

Kasbah Resources established a Long Term Incentive Plan in 2017 pursuant to which the Directors of Kasbah Resources, at their discretion, may grant conditional performance rights to senior executives that entitle those individuals to receive fully paid ordinary shares by way of issue for nil cost. There are 43,396,224 conditional performance rights on issue at the date of this report that are held by three senior executives of Kasbah Resources. Vesting of the conditional performance rights is contingent on Kasbah Resources achieving certain specified performance hurdles over a three year period.

Kasbah Resources' shareholders approved a Non-Executive Directors Share Rights Plan in 2017 pursuant to which non-executive directors may elect to receive all or part of their remuneration in the form of shares rights that entitle those individuals to receive fully paid ordinary shares by way of issue at nil additional cost. There are 8,827,204 share rights on issue at the date of this report that are held by four non-executive directors of Kasbah Resources. These share rights vest twelve months after grant date or upon resignation (in which case the vesting is pro rata to the number of months served).

Outstanding options to acquire 6,000,000 fully paid ordinary shares are held by two senior executives of Kasbah Resources. Half of the options are exercisable up to 4 May 2020 at 3.3ϕ each and the other half are exercisable up to 25 July 2020 at 2.2ϕ each, subject to certain vesting conditions.

4.5 Sharemarket Performance of Kasbah Resources Shares



The Kasbah Resources share price and volume of trading since January 2014 are set out graphically below:

The Kasbah Resources share price had declined sharply and steadily from early 2014 to mid 2015 to trade in a broad range of $2-3\phi$ in the period leading up to the announcement of the results of the definitive feasibility study for the 2016 Small Start Option at the Achmmach Tin Project and the near simultaneous announcement of the proposed reverse merger with Asian Mineral Resources (announced on 11 and 12 August 2016 respectively). Just prior to those announcements, the share price spiked from 2.5ϕ to 6.3ϕ . Kasbah Resources shares were placed in a trading halt while these two announcements were finalised.

Upon removal of the trading halt, the Kasbah Resources share price fell quickly back to trade in the range of $2-3\phi$ in the period leading up to (and following) the meeting to vote on the proposed reverse merger. Even though shareholders voted in favour of the proposal, the scheme of arrangement did not

proceed because the Court did not ratify it. Following the failure of the scheme of arrangement, a placement of shares was made to Pala Investments at 2.7 ¢ per share to raise \$3.7 million to fund ongoing expenditure in relation to the Achmmach Tin Project. The placement was made at a 12.5% premium to the share price of 2.4% per share at the time. A further fund raising by way of a rights issue at 2.3% per share (being a slight discount to the share price at the time) was foreshadowed.

The Kasbah Resources share price continued to decline and reached a low of 1.5ϕ in June 2017 when a revised rights issue to raise \$5.2 million at 1.5ϕ per share was announced. A substantial shareholder, International Finance Corporation (the private sector arm of the World Bank) disposed of its entire 14.2% shareholding through a block trade at the same price of 1.5ϕ per share at which the rights issue was subsequently completed.

Following these capital raisings, the Kasbah Resources share price traded in the range $1.2-1.8\phi$ for the remainder of 2017 and the first half of 2018. Kasbah Resources announced the completion of the 2018 Definitive Feasibility Study on 16 July 2018. The Kasbah Resources share price continued to decline and had traded at less than 1.0ϕ for the month prior to the announcement of the Proposed Transaction.

Movement in the Kasbah Resources share price compared to market indices and tin prices is shown below:



The Kasbah Resources share price has underperformed the market indices and underperformed relative to the US\$ tin price during the entire period from 2014 to date. The US\$ tin price and the ASX Metals & Mining Index have both been relatively volatile and both have underperformed the All Ordinaries Index over the same period although the ASX Metals & Mining Index has recently recovered to levels that are similar to the overall market.

5 Valuation of Kasbah Resources

5.1 Valuation Summary

Sumner Hall has valued Kasbah Resources in the range 2.3-3.8¢ per share as summarised below:

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| Kasbah Resources – Valuation Summary (\$ millions) | | | | | | |
|--|-------------------------------|--------------|--|--|--|--|
| | Valuation Range (\$ millions) | | | | | |
| | Low | High | | | | |
| Achmmach Tin Project (75% interest) | 39.6 | 55.5 | | | | |
| Mineral exploration assets | 0.1 | 0.6 | | | | |
| Total mineral assets | 39.7 | 56.1 | | | | |
| Cash and cash equivalents | 0.119 | 0.1 | | | | |
| Notional cash from exercise of options | 0.1 | 0.2 | | | | |
| Capitalised future corporate overheads | (10.9) | (10.9) | | | | |
| Carryforward tax losses ²⁰ | - | - | | | | |
| Enterprise value | 29.0 | 45.5 | | | | |
| Pala Investments loan (including accrued interest to 31 December 2018) | 4.0 | 4.0 | | | | |
| Net value of Kasbah Resources | 25.0 | 41.5 | | | | |
| Shares on issue ²¹ (millions) | 1,100.303 | 1,103.303 | | | | |
| Net value per share | 2.3¢ | 3.8 ¢ | | | | |

Kasbah Resources has been valued by aggregating the estimated fair market value for each of Kasbah Resources' mineral assets (and the corporate costs necessary to sustain them) together with the estimated net realisable value for the other assets and liabilities of the company.

This value is appropriate for the acquisition of Kasbah Resources as a whole and, accordingly, incorporates a premium for control. A value determined on this basis would usually exceed the price at which shares will trade on a stock exchange in the absence of a takeover offer or other proposal involving a change in control and assuming that the market is fully informed. Sharemarket trading typically represents transactions in small parcels of shares ("portfolio interests"). Portfolio interests are normally priced at a discount to underlying value to reflect, inter alia, the lack of corporate control and the lack of direct access to cash flows and taxable income.

5.2 Valuation Methodology

There are four primary methodologies commonly used for valuing businesses and assets:

- discounting of projected cash flows;
- capitalisation of earnings;
- industry rules of thumb; and
- estimation of the aggregate proceeds from an orderly realisation of assets.

Each of these valuation methodologies has application in different circumstances. The primary factors to be considered in determining which methodology is appropriate are the nature and level of information available and the usual practice adopted by purchasers and valuers of the type of businesses and assets involved.

None of Kasbah Resources' mineral assets are currently in production:

 development of the Achmmach Tin Project has reached the stage of a completed Definitive Feasibility Study (including detailed projections of expected future cash flows) and most

¹⁹ This figure includes the impact of actual cash receipts and cash disbursements from 30 June 2018 to 30 September 2018 and projected cash disbursements through 31 December 2018.

²⁰ Moroccan carryforward tax losses have been taken into account in the discounted cash flow valuation of the Achmmach Tin Project. No value has been attributed to Australian carryforward tax losses on the basis that those losses are unlikely to be able to be utilised by a purchaser of Kasbah Resources and may be of limited use even if the ownership of Kasbah Resources does not change.

²¹ This figure includes shares that would be issued from the vesting of performance rights and non-executive director share rights and from the exercise of in-the-money options based on the net value per share.

permitting is in place but funding of the project has not yet been obtained and construction is not due to commence until 2019 with first production expected in 2020; and

• the other mineral assets are at the exploration stage.

Sumner Hall's primary approach to estimating the value of each of Kasbah Resources' mineral assets has been:

- the Achmmach Tin Project has been valued on the basis of the net present value of projected cash flows from the completed Definitive Feasibility Study and life-of-mine plan, adjusted as necessary to allow for the findings of AMC's technical assessment of the project, and including an appropriate allowance for development risk commensurate with the remaining development milestones; and
- the other mineral exploration assets have been valued on the basis of AMC's technical assessment of exploration asset values.

The value of Kasbah Resources' mineral assets has been offset by an estimate of the net present value of the corporate overheads that will be necessary to conduct the operation of the assets over a time period that corresponds to the valuation approach underlying each of the assets. The other assets and liabilities of Kasbah Resources have been valued on the basis of the estimated net realisable value for each item.

5.3 Valuation of the Achmmach Tin Project

Sumner Hall has valued 100% of the Achmmach Tin Project in the range \$US37.5-52.5 million. At the current exchange rate of A\$1.00=US\$0.71, this equates to the range \$A52.8-73.9 million. Accordingly, Sumner Hall has valued Kasbah Resources' 75% interest in the Achmmach Tin Project in the range A\$39.6-55.5 million.

The valuation range is fairly wide. This reflects uncertainties associated with the Achmmach Tin Project regarding the likelihood of funding, construction and operation in line with the Definitive Feasibility Study and life-of-mine plan as well as uncertainties that are associated with mining operations generally including, in this case, expected future US\$ tin prices.

Sumner Hall has developed a discounted cash flow model for a valuation of the Achmmach Tin Project. The discounted cash flow model is based on the life-of-mine plan from the detailed financial model that formed part of the Definitive Feasibility Study together with adjustments to that life-of-mine plan that AMC regards as appropriate and economic assumptions that Sumner Hall regards as appropriate. The results of Sumner Hall's discounted cash flow valuation of 100% of the Achmmach Tin Project are summarised below:

| Achmmach Tin Project – Net Present Value Summary (US\$ millions) | | | | | | | | | | |
|--|----------------------|------|------|------|-------|-------|-------|--|--|--|
| | Discount Rate (real) | | | | | | | | | |
| | 8.0% | 8.5% | 9.0% | 9.5% | 10.0% | 10.5% | 11.0% | | | |
| US\$ tin price based on market consensus forecasts ²² | 56 | 51 | 47 | 42 | 38 | 34 | 30 | | | |
| US\$ tin price of \$21,000 per tonne ²³ | 91 | 85 | 79 | 74 | 69 | 64 | 59 | | | |

The AMC report includes a detailed analysis of the geology, resource, production profile, capital costs, mining and processing operations and operating costs for the Achmmach Tin Project. AMC has identified a number of areas where the assumptions and figures that are set out in the Definitive Feasibility Study and life-of-mine plan should, in AMC's view, be adjusted. The principal adjustments that have been made are:

²² Market consensus US\$ tin prices have been adopted from the forecasts published by Consensus Economics, Inc. in their publication entitled "Energy & Metals Consensus Forecasts" dated 15 October 2018. The long term tin price forecast (in real terms) is US\$19,319 per tonne.

²³ This is the US\$ tin price (in real terms) that was assumed in the Definitive Feasibility Study to be maintained over the life of the project.

i) the mine life has been extended by two years with an additional 750,000 tonnes of ore mined at a grade 0f 0.70% contained tin; and

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ii) underground development costs have been increased to allow for higher than budgeted contractor rates, mining costs have been increased to allow for higher ground support costs for roof bolting and mesh and additional sustaining capital has been allowed for debottlenecking post commissioning of the processing plant.

A copy of AMC's report is included as Annexure C to this report.

Based on this analysis (which is discussed in more detail below), Sumner Hall has adopted a range of \$US37.5-52.5 million as the fair market value for 100% of the Achmmach Tin Project as at the date of this report. The principal reasons for reaching this conclusion are that:

- the market consensus estimates for the US\$ tin price (with a long term real price estimate of US\$19,319 per tonne) that have been adopted by Sumner Hall are more current than the US\$21,000 per tonne tin price that was adopted in the Definitive Feasibility Study and, in Sumner Hall's view, are more likely to be representative of the tin price that would be adopted by potential purchasers of the Achmmach Tin Project as at the date of this report (although a long term tin price of US\$21,000 per tonne is not unreasonable and represents potential upside in the valuation process); and
- a weighted average cost of capital of 8% (in real terms) is a typical discount rate that is adopted by mining companies to assess the value of a project based on a completed feasibility study but purchasers of mining companies and mineral assets, where the principal asset is a pre-production stage project based on a completed feasibility study, usually apply an additional development risk discount in the form of adopting a higher discount rate in the discounted cash flow model.

| Achmmach Tin Project – Production Profile | | | | | | | | | | |
|--|------|---------------------|-------|-------|-----------------------------|-----------------------------|-------|-------|------|--------|
| | | Year ending 30 June | | | | | | | | |
| | 2020 | 2021 | 2022 | 2023 | 2024- 2027 ²⁴ | 2028- 2031 ²⁵ | 2032 | 2033 | 2034 | Total |
| Ore mined (mtpa) | - | 0.213 | 0.691 | 0.749 | 0.744 | 0.749 | 0.700 | 0.186 | - | 8.513 |
| Grade (Sn%) | - | 0.85% | 0.83% | 0.89% | 0.86% | 0.74% | 0.70% | 0.70% | - | 0.80% |
| Contained tin (tonnes Sn) | - | 1,810 | 5,749 | 6,699 | 6,387 | 5,516 | 4,920 | 1,311 | - | 68,105 |
| Ore processed ²⁶ (mtpa) | - | 0.149 | 0.481 | 0.520 | 0.517 | 0.511 | 0.493 | 0.170 | - | 5.925 |
| Grade (Sn%) | - | 1.14% | 1.12% | 1.20% | 1.16% | 1.02% | 0.89% | 0.80% | - | 1.08% |
| Contained tin (tonnes Sn) | - | 1,694 | 5,381 | 6,264 | 5,977 | 5,194 | 4,403 | 1,371 | - | 63,795 |
| Process plant recovery rate ²⁷ | - | 69.5% | 82.6% | 83.7% | 83.1% | 80.4% | 78.2% | 77.2% | - | 81.5% |
| Recovered tin (tonnes Sn) | - | 1,178 | 4,447 | 5,243 | 4,975 | 4,178 | 3,444 | 1,058 | - | 51,981 |
| Tin concentrate ²⁸ produced (tonnes) | - | 1,964 | 7,411 | 8,739 | 8,292 | 6,963 | 5,739 | 1,763 | - | 86,635 |

The production profile from the Definitive Feasibility Study and adjusted life-of-mine plan is summarised below:

Construction of the mine is expected to commence by mid 2019 with first ore mined approximately 15-20 months later. Approximately 8.5 million tonnes of tin ore are expected to be mined over a twelve year life at a peak mining rate of 750,000 tonnes of ore per annum. The average tin grade is 0.80%

The figures that are shown in this table are the average figures for the four years from 2024-2027.

²⁵ The figures that are shown in this table are the average figures for the four years 2028-2031.

²⁶ This figure represents the tonnage of post-sorting ore that is processed through the plant.

²⁷ This represents the percentage of tin recovered from the post-sorting ore that is processed through the plant rather than the total ore that is mined. Kasbah Resources reports a recovery rate expressed as a percentage of tin recovered from the total ore mined. That percentage will be lower than the percentages that are set out in this table.

²⁸ The processing plant is designed to produce a tin concentrate (SnO_2) with a 60% tin component.

resulting in 68,105 tonnes of contained tin being mined over the life-of-mine.

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The introduction of ore sorting techniques is designed to allow for the discarding of the lowest grade ore and a consequent reduction of ore processing costs. Approximately 5.9 million tonnes of selected ore is to be processed at a peak processing rate of 520,000 tonnes per annum. The average tin grade for the selected ore is 1.08% resulting in 63,795 tonnes of contained tin being processed over the plant life.

The processing plant is designed to produce a 60% tin SnO_2 concentrate. The initial plant recovery rate (on average over the plant life) is 81.5% of the contained tin from the post-sorting ore that is processed. This results in a total of 51,981 tonnes of recovered tin at a peak rate of approximately 5,200 tonnes per annum. Accordingly, a total of 86,635 tonnes of 60% tin SnO_2 concentrate are expected to be produced over the twelve year life of the mining and processing operation.

The adjusted life-of-mine discounted cash flow model that results from this planned production profile is summarised below²⁹:

| Achmmach Tin Project – Projected Operating Results and Cash Flows | | | | | | | | | | |
|---|-------|--------|----------|----------|-----------|-----------------------------|-----------------------------|----------|----------|-------|
| | | | | Year end | ling 30 J | une (USS | 6 million | s) | | |
| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024- 2027 ³⁰ | 2028- 2031 ³¹ | 2032 | 2033 | 2034 |
| Tin concentrate produced (tonnes) | - | - | 1,964 | 7,411 | 8,739 | 8,292 | 6,963 | 5,739 | 1,763 | - |
| Saleable metal ³² | - | - | 56.8% | 56.8% | 56.8% | 56.8% | 56.8% | 56.8% | 56.8% | - |
| Tin sales (tonnes) | - | - | 1,116 | 4,211 | 4,965 | 4,712 | 3,956 | 3,261 | 1,002 | - |
| Gross sales revenue | - | - | 22.4 | 82.4 | 96.8 | 91.1 | 76.4 | 63.0 | 19.4 | - |
| (US\$ price per tonne) | - | - | \$20,071 | \$19,569 | \$19,485 | \$19,344 | \$19,319 | \$19,319 | \$19,319 | - |
| Treatment and transport | - | - | 1.2 | 4.5 | 5.4 | 5.1 | 4.3 | 3.5 | 1.1 | - |
| Government royalties ³³ | - | - | 0.6 | 2.3 | 2.7 | 2.6 | 2.2 | 1.8 | 0.5 | - |
| Net sales revenue | - | - | 20.6 | 75.5 | 88.7 | 83.5 | 70.0 | 57.7 | 17.7 | - |
| Mining costs | - | 0.1 | 8.6 | 27.5 | 27.8 | 25.6 | 22.5 | 18.5 | 4.6 | - |
| Processing costs | - | - | 4.2 | 11.0 | 11.7 | 11.5 | 11.6 | 11.0 | 3.0 | - |
| Administration costs | 0.7 | 4.1 | 4.8 | 4.2 | 4.2 | 4.2 | 4.1 | 4.1 | 1.6 | - |
| Total operating costs | 0.7 | 4.2 | 17.5 | 42.7 | 43.7 | 41.2 | 38.2 | 33.6 | 9.2 | - |
| EBITDA (loss) | (0.7) | (4.2) | 3.0 | 32.8 | 44.9 | 42.3 | 31.8 | 24.1 | 8.6 | - |
| Depreciation | 0.3 | 5.2 | 11.5 | 14.4 | 16.8 | 19.4 | 10.2 | 4.5 | 3.6 | 2.7 |
| Profit (loss) before tax | (1.0) | (9.3) | (8.4) | 18.4 | 28.2 | 22.9 | 21.6 | 19.6 | 4.9 | (2.7) |
| Taxes paid ³⁴ | - | - | - | - | (4.7) | (4.0) | (3.8) | (3.5) | (0.9) | - |
| Change in working capital | (0.1) | (0.7) | (2.9) | (4.8) | (2.8) | 0.5 | - | 1.4 | 4.3 | 0.6 |
| Operating cash flow | (1.1) | (10.0) | (11.4) | 13.6 | 20.6 | 19.4 | 17.8 | 17.6 | 8.3 | (2.1) |
| Addback depreciation | 0.3 | 5.2 | 11.5 | 14.4 | 16.8 | 19.4 | 10.2 | 4.5 | 3.6 | 2.7 |
| Capital expenditure ³⁵ | (4.0) | (74.6) | (26.5) | (10.4) | (18.6) | (8.4) | (3.3) | - | - | - |
| Demobilisation and closure costs | - | - | - | - | - | - | - | - | (3.1) | (1.3) |
| Salvage value of assets | - | - | - | - | - | - | - | - | 2.7 | - |
| Net cash flow | (4.8) | (79.5) | (26.4) | 17.7 | 18.8 | 30.4 | 24.7 | 22.1 | 11.6 | (0.6) |

29 The figures in the life-of-mine model are shown in real terms (*i.e.*, the figures do not incorporate inflation).

30 The figures that are shown in this table are the average figures for the four years from 2024-2027.

31 The figures that are shown in this table are the average figures for the four years 2028-2031.

32 This represents the 60% tin component in the SnO_2 concentrate less a deduction for impurities and other allowances.

33 Royalties payable to the Moroccan Government are equal to 3% of gross sales revenue less smelter treatment charges and transport costs.

34 Taxes paid represents Moroccan corporate tax paid at the rate of 17.5% (for mining companies), after allowing for tax loss carryforwards, as well as relatively small additional taxes paid for a local extraction tax and local business and municipal services taxes.

35 Capital expenditures includes underground mine development costs and sustaining capital expenditure as well as the initial capital cost for the processing plant and other mine and plant infrastructure. This figure is also net of Moroccan government infrastructure rebates.

Tin sales are expected to total approximately 49,000 tonnes over the twelve year life-of mine (after deductions for impurities and other allowances) with peak tin sales of approximately 5,000 tonnes per annum during the years 2023 to 2026. First tin production is expected to occur towards the end of calendar year 2020 and ramp up to full production levels over the following six months.

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The project's revenues (and net cash flows) are highly sensitive to the US\$ tin price. The projections that are set out above assume that the US\$ tin price (in real terms) will increase slightly from the current price of US\$19,100 per tonne to a high of US\$20,071 per tonne in 2021 before gradually declining to a long term real price of US\$19,319 per tonne.

The US\$ tin price has retreated from recent highs in the range US\$21-22,000 per tonne that were being realised in early 2018. The current and projected US\$ tin prices compare to historical tin prices as shown below:



The current spot price for tin is US\$19,100 per tonne. This is lower than the historical long term average prices (since the GFC) which are:

- a five year historical average of US\$19,703 per tonne; and
- a ten year historical average of US\$20,743 per tonne.

The projections that have been included in the cash flow figures that are set out above (based on market consensus forecasts), by comparison to historical tin prices and the long term trend line³⁶, are shown below:



³⁶ The R^2 factor for the polynomial trend line is 0.74. The further that an R^2 factor is from 1.00 is an indication of the extent to which the individual years of data vary from the trend line.



These tin price assumptions produce gross sales revenue in the order of US\$90-95 million per annum at peak production levels. After deducting smelter treatment charges and transport costs, a 3% royalty is payable to the Moroccan Government.

The principal operating costs are:

- mining costs;
- processing costs; and
- administration costs.

Mining costs include underground lateral development costs, ore production and backfilling, haulage of ore and waste, grade control, fixed costs for infrastructure power and fixed costs for labour and overheads. These costs average approximately US\$5,700 per tonne of saleable tin metal produced over the life-of-mine (although that is not the unit cost basis on which they are incurred).

Processing costs include ore sorting, reagents and consumables, power, technical services and labour costs. Reagents, consumables and power costs account for nearly 80% of total processing costs. These total costs average approximately US\$2,700 per tonne of saleable tin metal produced over the life-of-mine (although that is not the unit cost basis on which they are incurred).

Administration costs include the costs of the local operations in Morocco as well as an allocation of corporate overhead costs from the Perth and Melbourne offices. Total administration costs average approximately US\$1,100 per tonne of saleable tin metal produced over the life-of-mine.

The project is expected to generate EBITDA in the order of US\$35-45 million per annum at peak production levels. After allowing for depreciation of capital expenditure, Moroccan corporate tax is payable at a 17.5% rate. Carryforward tax losses (resulting from previously incurred Moroccan tax deductible expenditure) have been allowed for in the calculation of taxes payable.

Capital expenditure, demobilisation and mine closure costs, working capital requirements and equipment salvage value have been allowed for as set out in the 2018 Definitive Feasibility Study and adjusted as considered appropriate by AMC and/or Sumner Hall.

The resulting net cash flows have been discounted back to the date of this report in order to estimate a fair market value for 100% of the Achmmach Tin Project. A range of discount rates³⁷ has been

³⁷ The discount rates that have been considered are based on an estimation of the weighted average cost of capital that a hypothetical potential purchaser of an interest in the Achmmach Tin Project would adopt for valuation purposes.

considered. Various models have been developed in corporate finance theory to explain or support commercial judgments regarding discount rates that are made by potential purchasers of different types of assets. However, in Sumner Hall's view, a mechanistic application of a set of formulas derived from those theories should not be used as a substitute for commercial judgment. Sumner Hall has considered the results that can be observed from the application of commonly adopted formulas but has also weighed those results against Sumner Hall's commercial experience in relation to assets that are similar to the Achmmach Tin Project.

Sumner Hall has derived a discount rate in the range 7-8% (in real terms) from the application of corporate finance theory (before considering specific risk related to the Achmmach Tin Project)³⁸. It is likely that potential purchasers of an interest in the Achmmach Tin Project would add a specific risk premium to the discount rate to allow for uncertainties related to the stage of development of the Achmmach Tin Project and the ability to obtain funding to complete the development and construction of the Achmmach Tin Project. Sumner Hall has considered the appropriate quantum of this specific risk premium in reaching a conclusion as to the discount rate that would be adopted by potential purchasers of an interest in the Achmmach Tin Project.

5.4 Valuation of Other Mineral Exploration Assets

AMC has made an assessment of the value of Kasbah Resources' other mineral exploration assets on the basis of a variety of non-income based valuation methodologies including multiples of exploration expenditure and comparable transactions involving exploration assets. AMC's valuation is set out in detail in their report that is included as Annexure C to this report.

Based on AMC's report, Sumner Hall has valued Kasbah Resources' other mineral exploration assets in the range \$0.1-0.6 million.

5.5 Corporate Overhead Costs

Kasbah Resources incurs corporate overhead costs for its Perth and Melbourne offices that are not allocated to the individual mineral development projects³⁹. After adjusting for certain non-recurring expenses, these corporate overhead costs are currently running at a rate of approximately \$2 million per annum. These costs include costs associated with exploration and development activities and the offices of the Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer, accounting and tax, company secretarial and legal services and listed company costs (*eg*, directors' fees, annual reports and shareholder communications, share registry costs and listing fees).

For valuation purposes, Sumner Hall has assumed that development of the Achmmach Tin Project is completed and that these corporate costs would continue through the expected life of the project. This results in an estimated present value for corporate overhead costs of approximately \$10.9 million.

5.6 Other Assets and Liabilities

Apart from cash on hand (which is principally required to fund ongoing corporate overhead costs) and the shareholder loan from Pala Investments, Kasbah Resources has no other significant assets or liabilities.

5.7 Alternative Valuation Methodologies

Regulatory Guide 111 states that an expert should, where possible, use more than one valuation methodology. Regulatory Guide 111 refers to a number of valuation methodologies that ASIC considers it generally appropriate for an expert to consider:

 the discounted cash flow valuation methodology together with the estimated realisable value of any surplus assets;

³⁸ The basic components of this calculation are a debt to debt plus equity ratio in the range 30-40%, a risk free rate in the order of 3-4%, a market risk premium of 6% and a beta factor in the range 1.2-1.5 times. Further detail regarding these components is set out in Annexure B to this report.

³⁹ A limited amount of these corporate overhead costs are allocated to the Achmmach Tin Project in accordance with the shareholders' agreement. Those costs have been taken into account in Sumner Hall's valuation of the Achmmach Tin Project.

- the application of earnings multiples appropriate to the business or industry in which the company operates to the estimated future maintainable earnings or cash flows of the business together with the estimated realisable value of any surplus assets;
- the amount that would be available for distribution to security holders in an orderly realisation of the company's assets;
- the quoted price for listed securities, when there is a listed and active market and allowing for the fact that the quoted price may not reflect the value of those securities in the context of an acquisition of 100% of the company; and
- any recent genuine offers received by the company for the entire business or any business units.

Regulatory Guide 111 also suggests that alternative valuation methodologies should be considered as a secondary check on the results of the principal valuation methodology.

The principal valuation approach that has been adopted by Sumner Hall is the discounted cash flow valuation methodology. Sumner Hall has considered whether it is appropriate to consider any of these other valuation approaches as an alternative valuation methodology or as a secondary check on the discounted cash flow valuation result.

Valuations based on an estimate of the aggregate proceeds from an orderly realisation of assets typically attribute no value to goodwill or other intangible assets associated with ongoing trading and are rarely appropriate for valuation of a company as a going concern. This valuation approach is not appropriate for Kasbah Resources either as a principal or alternative valuation methodology.

The prices for shares that can be observed through sharemarket trading typically represent the value of portfolio interests in those shares and do not reflect the value of a controlling interest in the company. Valuations based on the use of quoted prices for listed securities are typically found in relation to the estimated realisable value of surplus assets where a company has an investment portfolio including non-controlling interests in various businesses. This valuation approach is not appropriate for Kasbah Resources either as a principal or alternative valuation methodology.

Sumner Hall has made enquiries with the management of Kasbah Resources and has been advised (and it not otherwise aware) that no recent genuine offers have been received by Kasbah Resources either for the entire company, for the company's 75% interest in the Achmmach Tin Project or for any of the company's mineral exploration assets.

The nature of the principal assets of Kasbah Resources (*ie*, a pre-production tin mining project and a number of mineral exploration assets) means that the various permutations of the capitalised earnings methodology (*ie*, EBITDA multiples, EBIT multiples or price earnings multiples) are not particularly relevant or useful as either a principal valuation methodology or as an alternative valuation methodology. Summer Hall has, however, considered comparisons with the market prices paid for interests in tin mining projects and the trading prices for listed companies with significant tin mining projects when expressed as a multiple of tin resources as a cross check on the discounted cash flow valuation result for the Achmmach Tin Project. This market evidence is summarised below:

| Market Evidence Regarding Selected Comparable Tin Projects | | | | | | | | | |
|--|-----------------------------------|---|---------------------------------|-----------------|------------------------------|--|--|--|--|
| | Enterprise Published Tin Resource | | | | | | | | |
| Listed Company or Asset Acquired | Principal Project Location | Value for Tin Assets (A\$ millions) | Resource (million tonnes) | Grade (% Sn) | Contained Tin (tonnes) | Tonne of Contained Tin (A\$ per tonne) | | | |
| Alphamin Resources | DR Congo | 253 | 4.2 | 4.49% | 186,371 | \$1,359 | | | |
| Aus Tin Mining | Australia | 39 | 36.3 | 0.16% | 57,200 | \$683 | | | |
| Metals X | Australia | 112 | 21.0 | 0.78% | 164,500 | \$679 | | | |
| 51% interest in Bygoo Tin Project | Australia | 5 | 1.2 | 1.10% | 12,870 | \$417 | | | |
| Venture Minerals | Australia | 12 | 45.1 | 0.18% | 82,000 | \$146 | | | |
| Adex Mining | Canada | 9 | 18.5 | 0.34% | 63,519 | \$144 | | | |
| 96% interest in Oropesa Tin Project | Spain | 7 | 12.5 | 0.54% | 67,520 | \$109 | | | |
| Elementos | Australia | 13 | 23.1 | 0.53% | 123,489 | \$103 | | | |
| TNT Mines | Australia | 6 | 8.7 | 0.79% | 69,025 | \$80 | | | |
| Stellar Resources | Australia | 5 | 98.6 | 1.00% | 85,792 | \$62 | | | |
| Average | | 46 | 27.0 | 0.99% | 91,229 | \$378 | | | |
| Median | | 11 | 19.8 | 0.66% | 75,513 | \$145 | | | |

The detailed information underlying this analysis (including information on additional companies and tin projects for which enterprise value information could not be obtained) is included as Annexure A to this report.

By comparison, Sumner Hall's valuation of the Achmmach Tin Project implies the following values per tonne of contained tin:

| Valuation of the Achmmach Tin Project | | | | | | | |
|---------------------------------------|---------------------------------------|---------------------------------|-----------------|------------------------------|--|--|--|
| | | Publis | Value per | | | | |
| | Enterprise Value (A\$ millions) | Resource (million tonnes) | Grade (% Sn) | Contained Tin (tonnes) | Tonne of Contained Tin (A\$ per tonne) | | |
| High end of range (US\$37.5 million) | 73 | 14.9 | 0.85% | 127,300 | \$573 | | |
| Low end of range (US\$52.5 million) | 52 | 14.9 | 0.85% | 127,300 | \$409 | | |



This comparison is shown graphically below:

The highest implied value per tonne of contained tin, by far, is for Alphamin Resources. The principal asset of Alphamin Resources is the Bisie Tin Project that is located in the North Kivu province of the Democratic Republic of the Congo ("the DRC"). The Bisie Tin Project is under construction, with offtake agreements in place, and Alphamin Resources has announced that first tin production is expected sometime during 2019. The Bisie Tin Project has been certified as a conflict free source of tin^{40} .

The value per tonne of contained tin for the Bisie Tin Project that is implied by trading in shares of Alphamin Resources is A\$1,359 per tonne. This is more than twice as high as the implied figures from the high end of Sumner Hall's valuation of the Achmmach Tin Project and over three times the implied figures from the low end.

There are several reasons that this should not be taken as a reason to conclude that the Achmmach Tin Project has been undervalued (at least at the current stage of development):

- i) the Bisie Tin Project is more advanced than the Achmmach Tin Project with project funding in place, construction underway, offtake arrangements in place and first tin production expected during 2019;
- ii) the Bisie Tin Project has a particularly high grade tin resource; and
- iii) the published tin reserves for the Bisie Tin Project of 135,095 tonnes of contained tin make up 72% of the published tin resources of 186,371 tonnes of contained tin⁴¹. By comparison, the tin reserves that have been assumed in relation to the valuation of the Achmmach Tin Project of 68,105 tonnes of contained tin represent only 53% of the tin resources of 127,300 tonnes of contained tin. Expressed as a value per tonne of tin reserve (rather than resource), the value per tonne for the Bisie Tin Project would be A\$1,875 per tonne and the Achmmach Tin Project would be in the range A\$766-1,072 per tonne.

This does, however, provide a reason to expect that the potential value of the Achmmach Tin Project, assuming that development and construction are successfully completed, could be significantly greater than Sumner Hall's estimate of the fair market value for the project at the current date.

Sumner Hall's valuation of the Achmmach Tin Project implies values per tonne of contained tin that are equal to the average for the comparable companies at the low end of the valuation and significantly higher at the high end of the valuation. Excluding the Bisie Tin Project, the average value for the comparable companies would be A\$269 per tonne and the median value would be A\$144 per tonne. Sumner Hall's valuation of the Achmmach Tin Project is just over double this average at the high end of the valuation. Considering the attributes of the Achmmach Tin Project by comparison to these other tin projects and the severe limitations of this cross check compared to a discounted cash flow valuation, Sumner Hall considers its valuation range for the Achmmach Tin Project to be appropriate.

⁴⁰ Tin is one of the four so-called "conflict metals" (the others being tantalum, tungsten and gold) for which regulations were introduced in the United States and Europe that restricted the ability of potential customers to purchase tin from conflict tainted suppliers. "Conflict metals" is a subset of "conflict resources" which refers to natural resources that are mined in an armed conflict zone and the sale proceeds used to fund further fighting. The earliest example was "conflict diamonds" that were used to finance rebel fighters in Angola and Sierra Leone in the 1990s. More recently, armed conflict in the DRC led to regulatory restrictions being introduced on this source of supply in or around 2010. Over time, some of the mines in the DRC have been able to comply with regulatory due diligence and certification provisions so that customers could again purchase from them.

⁴¹ Alphamin Resources has an 80.75% interest in the Bisie Tin Project and these figures represent 80.75% of the total tin resources of 230,800 tonnes of contained tin and the total tin reserves of 167,300 tonnes of contained tin.

6 Evaluation of the Proposed Transaction

6.1 Overall conclusion

In Sumner Hall's opinion, the Proposed Transaction is not fair but it is reasonable, in the absence of a superior proposal, having regard to the interests of Kasbah Resources shareholders other than Pala Investments.

Sumner Hall has valued 100% of the shares in Kasbah Resources (assuming that 100% of the shares were freely available for acquisition by a hypothetical, willing but not anxious purchaser) in the range 2.3-3.8¢ per share. This represents an estimate of the full underlying value of Kasbah Resources including a premium for control. For the purpose of takeover style analysis, the value of the consideration for Kasbah Resources shareholders is considered to be the price at which Kasbah Resources shares might be expected to trade following completion of the Proposed Transaction. While any judgment in this regard is by its very nature subject to considerable uncertainty, Sumner Hall has adopted for the purposes of this analysis a post completion Kasbah Resources share price in the range 1.0-1.5¢. This assumed trading range of 1.0-1.5¢ for Kasbah Resources shares (which represents the value of a non-controlling interest in the shares of Kasbah Resources post completion of the Proposed Transaction) is less than the underlying value for 100% of the Kasbah Resources in the range 2.3-3.8¢ per share prior to completion of the Proposed Transaction is not fair.

The more important question for Kasbah Resources shareholders is whether they will be better off if they vote in favour of the Proposed Transaction than if they reject it. The revised shareholder loan to be provided by Pala Investments is on relatively expensive terms, considering both the interest rate and the conversion option that will be attached. However, there is nothing to suggest that the terms of the shareholder loan are uncommercial. Kasbah Resources is a risky credit for a lender and it should be expected that a significant return would be required to compensate for that risk. Although Pala Investments' shareholding percentage in Kasbah Resources will increase significantly if the conversion option is exercised, Pala Investments already has an effective blocking stake in Kasbah Resources and some measure of potential control of the company.

Kasbah Resources has no immediate alternative to repaying or refinancing the existing shareholder loan from Pala Investments. Kasbah Resources also requires additional funds in order to continue to meet its share of the development costs for the Achmmach Tin Project and other corporate overhead costs. The Proposed Transaction is the only financing proposal that is currently available to Kasbah Resources. Rejection of the Proposed Transaction would almost certainly lead to an urgent requirement to raise funds to repay the amounts due and payable to Pala Investments as well as raising additional funds that would be necessary for the company to continue to operate. Any such capital raising would be likely to be on terms that would be more dilutionary for the non-associated shareholders of Kasbah Resources than the Proposed Transaction. There would also be an appreciable risk that Kasbah Resources would be placed into some form of administration on the basis that an alternative capital raising could not be completed on a timely basis or that some other alternative funding proposal would not eventuate. In this context, Kasbah Resources shareholders will almost certainly be better off if they approve the Proposed Transaction.

The Proposed Transaction includes a provision that the shareholders of Kasbah Resources approve, in anticipation, the granting of a first ranking security over the shares in Atlas Tin to Pala Investments in the event that Pala Investments requests that Kasbah Resources seek consent to the granting of that security from the other shareholders of Atlas Tin. In those circumstances, Pala Investments would become a secured creditor with respect to the shares in Atlas Tin rather than maintaining its current position as an unsecured creditor with respect to those shares. This would improve the position of Pala Investments vis-à-vis any other unsecured creditors of Kasbah Resources. However, this would not change the position of Pala Investments vis-à-vis the shareholders of Kasbah Resources because Pala Investments would continue to rank in priority to shareholders in any administration or winding up of Kasbah Resources that involved a disposal of the company's 75% shareholding in Atlas Tin.

Completion of the Proposed Transaction will also mean that the likelihood of an alternative offer for control of Kasbah Resources will be reduced because Pala Investments will have the right to increase its voting power from 21.5% to as high as 48.9% of the shares in Kasbah Resources. However, it would still be possible for another party to seek to acquire control of Kasbah Resources and, in any event, the opportunity to put forward an alternative proposal will remain until the meeting to consider the

Proposed Transaction is held and the Directors of Kasbah Resources would consider any such proposal on its merits if and when it arose.

The Proposed Transaction is not, however, a complete solution to Kasbah Resources' short term funding requirements. Kasbah Resources will receive additional cash from the Proposed Transaction that will support its requirements to fund its share of the development costs for the Achmmach Tin Project and other corporate overhead costs until March 2019. However, some additional funding is likely to be required (subject to the amount raised from the SPP) at that time in order to continue to fund development costs up to the point where debt funding for the Achmmach Tin Project has been finalised. The Proposed Transaction will place Kasbah Resources in a stronger position to raise that additional capital and, eventually, to raise its share of the equity funding for the project on better terms either through a further significant capital raising or a selldown of an interest in the project.

Taking all of these factors into account, Sumner Hall has concluded that the Proposed Transaction is reasonable even though it is not fair.

6.2 Key terms of the Proposed Transaction

Prior to the announcement of the Proposed Transaction, Kasbah Resources had a shareholders loan from Pala Investments of approximately \$3.4 million (including accrued interest up to the maturity date) that was due and payable on 31 December 2018. Pursuant to the announcement of the Proposed Transaction on 15 October 2018, an additional amount of \$0.5 million was advanced by Pala Investments to Kasbah Resources and the maturity date for the shareholders loan was extended to 31 March 2019.

The Proposed Transaction provides for the following:

- additional cash funding of approximately \$1.0 million will be provided to Kasbah Resources by Pala Investments;
- the shareholders loan (including accrued interest) of approximately \$4.0 million, together with the additional cash funding of approximately \$1.0 million and an arrangement fee of \$0.1 million will be combined into a convertible loan with a principal amount of \$5.1 million;
- the convertible loan will have a maturity date of 31 December 2019 that can be extended, at the option of Kasbah Resources, to 31 December 2020;
- the convertible loan will carry an interest rate of 12% per annum until 31 December 2019 and 15% per annum if extended beyond 31 December 2019;
- the convertible loan, including any accrued interest on the convertible loan, can be converted into new shares in Kasbah Resources by Pala Investments at any time at a conversion price of 1.2¢ per share;
- the convertible loan can be repaid by Kasbah Resources at any time, subject to Pala Investments' conversion rights, and it will be due and payable at the maturity date unless converted or extended prior to that date; and
- approval by Kasbah Resources shareholders, in anticipation, of a request from Pala Investments for an enhanced loan security in relation to the company's shares in Atlas Tin.

If the Proposed Transaction is approved and implemented, Kasbah Resources will avoid the requirement to repay the shareholders loan from Pala Investments on 31 March 2019 and Kasbah Resources will receive an immediate injection of approximately \$1.0 million of cash that can be utilised to continue to fund its share of the development costs of the Achmmach Tin Project and other corporate overhead costs. Accrued interest on the convertible loan will be capitalised. Pala Investments will have the right to convert the convertible loan, including accrued interest, into new shares in Kasbah Resources that would increase its shareholding from 21.5% to⁴²:

⁴² To the extent that Kasbah Resources issues new shares as a result of the SPP and to the extent that the proceeds are applied to repayment of amounts owing to Pala Investments, the amount of the shareholder loan from Pala Investments would be reduced and the potential percentage shareholdings of Pala Investments in Kasbah Resources would also be reduced accordingly.

• 44.2% in the event that Pala Investments were to convert the loan into shares immediately upon completion of the Proposed Transaction;

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- 46.1% in the event that Kasbah Resources does not exercise its option to extend the maturity date to 31 December 2020 and the loan is converted into shares on 31 December 2019; and
- 48.9% in the event that Kasbah Resources exercises its option to extend the maturity date to 31 December 2020 and the loan is converted into shares on 31 December 2020.

If the Proposed Transaction is not approved, the shareholders loan from Pala Investments of approximately \$4.1 million (including accrued interest) will be due and payable on 31 March 2019.

6.3 The consideration for Kasbah Resources shareholders is not fair

Based on assumptions that are regarded as reasonable and described in detail elsewhere in this report, Sumner Hall has valued 100% of Kasbah Resources in the range \$25.0-41.5 million which represents 2.3-3.8¢ per share after dilution for performance rights, share rights and options.

For the purpose of takeover style analysis, the value of the consideration for Kasbah Resources shareholders is considered to be the price at which Kasbah Resources shares might be expected to trade following completion of the Proposed Transaction. Judgments regarding future sharemarket trading prices are inherently subject to considerable uncertainty. Share prices are affected by different factors than the underlying value of the assets of a company and those factors are not always readily apparent. Share prices can also be volatile, even in the short term.

Within that context, Sumner Hall has adopted a share price in the order of $1.0-1.5\phi$ as the price at which shares in Kasbah Resources might be expected to trade following completion of the Proposed Transaction and in the absence of the announcement of any significant corporate activity or other material price sensitive information.

Sumner Hall's view reflects the following factors:

- Kasbah Resources shares have traded in the range 0.6-1.1¢ between the date of the announcement of the Proposed Transaction and the date of this report with a volume weighted average price of 0.94¢;
- the volume weighted average price for trading in Kasbah resources shares over the five days preceding the date of this report has been 1.1¢;
- the underlying value of Kasbah Resources, assuming completion of the Proposed Transaction, would be reduced on a per share basis (due to the dilutionary effect of the Proposed Transaction) from the range 2.3-3.8¢ to the range 2.0-3.0¢ as summarised below:

| Kasbah Resources – Underlying Value Per Share Before and After the Proposed Transaction | | | | | | | |
|---|-------------------|--------------------|-------------------------|--|--|--|--|
| | Before F Trans | Proposed action | After Cor Proposed T | npletion of Transaction ⁴³ | | | |
| | Low | High | Low | High | | | |
| Value of mineral assets | 39.7 | 56.1 | 39.7 | 56.1 | | | |
| Cash and cash equivalents | 0.1 | 0.1 | 1.1 | 1.1 | | | |
| Notional cash from exercise of options | 0.1 | 0.2 | - | 0.1 | | | |
| Capitalised future corporate overheads | (10.9) | (10.9) | (10.9) | (10.9) | | | |
| Enterprise value | 29.0 | 45.5 | 29.9 | 46.4 | | | |
| Pala Investments loan | 4.0 | 4.0 | - | - | | | |
| Net value of Kasbah Resources | 25.0 | 41.5 | 29.9 | 46.4 | | | |
| Shares on issue (millions) | 1,100.303 | 1,103.303 | 1,522.303 | 1,525.303 | | | |
| Net value per share | 2.3¢ | 3.8¢ | 2.0¢ | 3.0¢ | | | |

⁴³ These figures assume that Pala Investments would convert the loan into shares immediately upon completion of the Proposed Transaction.
- the volume weighted average price of approximately 1.0-1.1¢ at which Kasbah Resources shares have traded since the announcement of the Proposed Transaction sets a likely floor for the price at which Kasbah Resources shares would trade, at least in the short term, following completion of the Proposed Transaction (in the absence of the announcement of any material price sensitive information). This also assumes that there is an efficient market for Kasbah Resources shares. Sumner Hall has no reason to believe otherwise. Although the market for shares in Kasbah Resources is not highly liquid there has still been a sufficient level of liquidity to assume that trading in Kasbah Resources shares reflects an efficient and fully informed market;
- the diluted underlying value per share in the range 2.0-3.0¢ sets a likely ceiling for the price at which Kasbah Resources shares are likely to trade in the short term assuming completion of the Proposed Transaction;
- the high end of Sumner Hall's estimated trading range of 1.5¢ (post completion of the Proposed transaction) represents a discount of 25% (and, inversely, a control premium of 33%) from the low end of Sumner Hall's estimate of the underlying value for 100% of the shares in Kasbah Resources. This is broadly equivalent to the level of premiums that are generally observed in takeovers and schemes of arrangement in the Australian market that tend to be in the range 25-35% compared to the pre-offer share trading price⁴⁴;
- Sumner Hall's estimate of the underlying value for 100% of the shares in Kasbah Resources represents a premium of 60-140% relative to the midpoint of the assumed trading price in the range 1.0-1.5¢. This is well in excess of the premiums typically paid in takeover offers. However, having regard to factors including Pala Investments' position on the share register, the financial position of Kasbah Resources, uncertainty regarding the value of the Achmmach Tin Project, the likely need for Kasbah Resources to raise additional equity capital to fund its share of the completion of the development and construction of the Achmmach Tin Project and the ability of Kasbah Resources to do so, in Sumner Hall's view this level of premium is not unreasonable.

Because this assumed trading range of $1.0-1.5 \notin$ for Kasbah Resources shares (which represents the value of a non-controlling interest in the shares of Kasbah Resources post completion of the Proposed Transaction) is less than the underlying value for 100% of the Kasbah Resources in the range 2.3-3.8 \notin per share prior to completion of the Proposed Transaction, the Proposed Transaction is not fair.

While there is a possibility that the Kasbah Resources share price will strengthen in the weeks leading up to the shareholder vote on the Proposed Transaction, the relatively large size of the gap between Sumner Hall's estimate of the range at which Kasbah Resources shares might be expected to trade post completion (in the range 1.0-1.5¢ per share) and the estimated underlying value of the company prior to the Proposed Transaction (2.3-3.8¢ per share) means that the share price would have to increase substantially before Sumner Hall's conclusion in relation to fairness would change.

6.4 The Proposed Transaction is reasonable

An offer price that is fair is also, by definition (in terms of Regulatory Guide 111), reasonable. However, in this case the Proposed Transaction is not fair and it is therefore necessary to consider other factors to determine whether the Proposed Transaction is reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments.

Sumner Hall has considered the following factors in reaching a conclusion that the Proposed Transaction is reasonable:

- the allotment of shares to Pala Investments is to be made at a premium of 50% to the Kasbah Resources share price immediately prior to the announcement of the Proposed Transaction and a premium of 26% to the weighted average share price over the preceding 30 days⁴⁵;
- in the absence of the Proposed Transaction or some alternative funding, Kasbah Resources will not have sufficient resources to continue to participate in the funding and development of the Achmmach Tin Project or to continue to pay its creditors as and when they fall due;

⁴⁴ Refer, for example, to the Control Premium Study 2017 by RSM Australia Pty Ltd and the KPMG Valuation Practices Survey 2017.

⁴⁵ The allotment price is at a premium of only 3% to the weighted average share price in the four months since the announcement of the revised Definitive Feasibility Study results but the Kasbah Resources share price has declined significantly since that time.

- in the absence of the Proposed Transaction or some alternative funding arrangement, Sumner Hall expects that Kasbah Resources shares would continue to trade at prices below the allotment price of 1.2¢ per share;
- the most likely alternative to the Proposed Transaction would be a substantial rights issue that would almost certainly be at a discount to the current share price and possibly a large discount with the result that the non-associated shareholders of Kasbah Resources would be diluted to a greater extent than would occur pursuant to the Proposed Transaction;
- in the absence of the Proposed Transaction, or a superior proposal, there would be an appreciable risk that Kasbah Resources would be placed into some form of administration on the basis that an alternative capital raising could not be completed on a timely basis or that some other alternative funding proposal would not eventuate; and
- the approval, in anticipation, of an enhanced security position for Pala Investments in relation to the company's shares in Atlas Tin has a neutral impact on Kasbah Resources shareholders because Pala Investments already ranks in priority to shareholders in any administration or winding up of Kasbah Resources that would involve a disposal of the company's 75% shareholding in Atlas Tin.

In Sumner Hall's view, the disadvantages of the Proposed Transaction are outweighed by the benefits of the Proposed Transaction. Completion of the Proposed Transaction will mean that the exposure of Kasbah Resources shareholders to the value of the Achmmach Tin Project will be diluted. However, that dilution is likely to be less than it would be in the absence of the Proposed Transaction, or a superior proposal, in which case Kasbah Resources would have to seek additional capital from another source. Completion of the Proposed Transaction will also mean that the likelihood of an alternative offer for control of Kasbah Resources will be reduced because Pala Investments will have the right to increase its voting power from 21.5% to as high as 48.9% of the shares in Kasbah Resources. However, it would still be possible for another party to seek to acquire control of Kasbah Resources and, in any event, the opportunity to put forward an alternative proposal will remain until the meeting to consider the Proposed Transaction is held and the Directors of Kasbah Resources would consider any such proposal on its merits if and when it arose.

The Proposed Transaction is not, however, a complete solution to Kasbah Resources' short term funding requirements. Kasbah Resources will receive additional cash from the Proposed Transaction that will support its requirements to fund its share of the development costs for the Achmmach Tin Project and other corporate overhead costs until March 2019. However, some additional funding is likely to be required at that time (subject to the amount raised from the SPP) in order to continue to fund development costs up to the point where debt funding for the Achmmach Tin Project has been finalised. The Proposed Transaction will, however, place Kasbah Resources in a stronger position to raise that additional capital and, eventually, to raise its share of the equity funding for the project on better terms either through a further significant capital raising or a selldown of an interest in the project.

These other factors are discussed in more detail below.

6.4.1 Quantum of the premium for control

The price of $1.2 \notin$ at which new shares in Kasbah Resources will be allotted to Pala Investments upon conversion of the convertible loan represents a premium of 50% over the last trading price for Kasbah Resources shares of $0.8 \notin$ immediately prior to the announcement of the Proposed Transaction. The allotment price represents a premium of 26% to the weighted average share price of $0.95 \notin$ over the preceding 30 days and a premium of 3% to the weighted average share price of $1.17 \notin$ over the period of four months since the announcement of the revised Definitive Feasibility Study results in July 2018.

The one day and 30 day weighted average premiums are consistent with, or well above in the case of the one day premium, the level of premiums that are generally observed in takeovers and schemes of arrangement in the Australian market that tend to be in the range 25-35% compared to the pre-offer share trading price. However, it is important to recognise that:

- takeover premiums are observed outcomes rather than determinants of value;
- pre-offer share prices can sometimes reflect speculation regarding takeovers, other

corporate activity or other unusual factors;

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- takeover premiums often include some portion of special value for synergies as well as a premium for control; and
- takeover premiums vary widely depending on individual circumstances including many instances where the takeover premium is well below or well above the 25-35% range that is often cited as the typical range.

By contrast, the premium of 3% over the longer period (of approximately four months) since the announcement of the revised Definitive Feasibility Study results in July 2018 is low. This reflects the fact that the Kasbah Resources share price has declined significantly since that time. The reasons for this are likely to include uncertainties associated with the Achmmach Tin Project regarding the likelihood of funding, construction and operation in line with the Definitive Feasibility Study and life-of-mine plan as well as uncertainties that are associated with mining operations generally including, in this case, expected future US\$ tin prices.

6.4.2 Kasbah Resources requires additional funding to meet its commitments

Kasbah Resources had cash resources of approximately \$1.5 million as at 30 September 2018⁴⁶. The company's expected cash flow requirements to fund its share of development costs for the Achmmach Tin Project and other corporate overhead costs in the period to 31 December 2018 were in excess of this cash balance. In addition, prior to the announcement of the Proposed Transaction, the full amount of the shareholders loan from Pala Investments (which was approximately \$3.4 million including accrued interest up to the maturity date) was due for repayment on 31 December 2018.

In the absence of the Proposed Transaction or some alternative funding arrangement, Kasbah Resources would not have been able to meet its commitments or pay its debts as and when they fell due.

Kasbah Resources received a cash injection of \$0.5 million from Pala Investments subsequent to the announcement of the Proposed Transaction. The maturity date for the shareholder loan was also extended from 31 December 2018 to 31 March 2019. If the Proposed Transaction is approved, there will be a further cash injection of approximately \$1.0 million from Pala Investments and a further extension of the maturity date of the shareholder loan to 31 December 2019. This will remove any short term requirement to repay or refinance the shareholder loan (and, if converted to shares, any such requirement will cease to exist). This will also provide Kasbah Resources with sufficient cash to meet its commitments to fund its share of the development costs for the Achmmach Tin Project and other corporate overhead costs until March 2019. Beyond that date, some additional funding is likely to be required (subject to the amount raised from the SPP) in order to continue to fund development costs up to the point where debt funding for the Achmmach Tin Project has been finalised. The Proposed Transaction will, however, place Kasbah Resources in a stronger position to raise that additional capital and, eventually, to raise its share of the equity funding for the project on better terms either through a further significant capital raising or a selldown of an interest in the project.

If the Proposed Transaction is not approved, and in the absence of some alternative funding arrangement, Kasbah Resources would again be in the position of not being able to meet its commitments or pay its debts as and when they fell due. Kasbah Resources would require additional funds by January 2019 to meet its ongoing commitments regarding the Achmmach Tin Project and corporate overhead costs and it would also require an amount of approximately \$4.0 million to repay the Pala Investments loan when it fell due on 31 March 2019.

6.4.3 Outlook for trading in Kasbah Resources shares in the absence of the Proposed Transaction

Kasbah Resources shares traded in the range 0.8-1.0c during the 30 days prior to the announcement of the Proposed Transaction. The shares have traded in the range 0.6-1.1c since

⁴⁶ This figure has been obtained from the unaudited balance sheet for Kasbah Resources as at 30 September 2018. This takes into account cash disbursements that had taken place since 30 June 2018 when the cash balance was approximately \$3.0 million.

that announcement. In the event that the Proposed Transaction is not approved and Kasbah Resources was to remain listed, the company will require a significant amount of additional cash to continue to fund the development of the Achmmach Tin Project and to repay the shareholder loan from Pala Investments. The potential dilution from a significant capital raising to fund those activities would place downward pressure on the Kasbah Resources share price. In the absence of the Proposed Transaction or some alternative funding arrangement (or some other material price sensitive information), Sumner Hall expects that Kasbah Resources shares will continue to trade below the proposed allotment price of 1.2e per share that is contemplated in the Proposed Transaction, at least in the short term.

6.4.4 Alternative fund raising proposals that Kasbah Resources might pursue

In the event that the Proposed Transaction does not proceed, Kasbah Resources will face the need to raise a significant amount of capital in a short period of time (with some of these funds required urgently and the remainder by 31 March 2019). The most likely alternative appears to be a placement and/or rights issue that would need to be in the order of \$5 million (subject to the amount raised from the SPP). Any such capital raising would almost certainly be at a discount to the current share price and possibly a large discount with the result that the non-associated shareholders of Kasbah Resources would be diluted to a much greater extent than would occur pursuant to the Proposed Transaction.

6.4.5 There is a risk that Kasbah Resources would be placed into some form of administration

In the absence of the Proposed Transaction, or a superior proposal, there would be an appreciable risk that Kasbah Resources would be placed into some form of administration on the basis that an alternative capital raising could not be completed on a timely basis or that some other alternative funding proposal would not eventuate. This would almost certainly be the worst outcome in terms of shareholder value. In the event of an administration, shareholders would rank behind Pala Investments and any other creditors (irrespective of the proposed changes to the security arrangements in relation to the shares in Atlas Tin). In Sumner Hall's experience, there would be a reasonable prospect that Kasbah Resources' 75% interest in the Achmmach Tin Project would be sold for significantly less than the value that Sumner Hall has ascribed to that asset. Further, the costs of any such administration would also be likely to result in a significant adverse impact on shareholder value. In addition, the appointment of an administrator to Kasbah Resources may constitute an "Event of Default" under the Atlas Tin Shareholders Agreement, in which case the remaining Atlas Tin shareholders may be able to exercise a buy-out option to acquire Kasbah Resources' shareholding in Atlas Tin for "market value".

6.4.6 Changes to the loan security arrangements relating to shares in Atlas Tin have a neutral impact on Kasbah Resources shareholders

The shareholder loan from Pala Investments is currently secured by a first ranking charge over all of the assets of Kasbah Resources except for any assets that the company cannot grant security over without the consent of third parties. In particular, the latter category includes the company's 75% shareholding in Atlas Tin because the consent of the other shareholders in Atlas Tin is required for security to be granted over those shares. Pala Investments has the right to request that Kasbah Resources seek that consent from the other shareholders of Atlas Tin. However, even if that consent was forthcoming, it would be necessary for Pala Investments to seek approval from the shareholders of Kasbah Resources for the security to be granted because the ASX considers the collateralisation of a significant asset (in this case, the shares in Atlas Tin) to be a disposal of a significant asset for the purposes of Listing Rule 10.1 by virtue of having a shareholding of at least 10% of the company.

The Proposed Transaction includes a provision that the shareholders of Kasbah Resources approve, in anticipation, the granting of a first ranking security over the shares in Atlas Tin to Pala Investments in the event that Pala Investments requests that Kasbah Resources seek consent to the granting of that security from the other shareholders of Atlas Tin. In those circumstances, Pala Investments would become a secured creditor with respect to the shares in Atlas Tin rather than maintaining its current position as an unsecured creditor with respect to those shares. This would improve the position of Pala Investments vis-à-vis any other unsecured creditors of Kasbah Resources. However, this would not change the position of Pala Investments vis-à-vis

the shareholders of Kasbah Resources because Pala Investments would continue to rank in priority to shareholders in any administration or winding up of Kasbah Resources that involved a disposal of the company's 75% shareholding in Atlas Tin.

6.5 Each Kasbah Resources shareholder should make their own decision based on their own criteria

Sumner Hall has been engaged to prepare an independent expert's report setting out its opinion as to whether the Proposed Transaction is fair and reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments. Sumner Hall has not been engaged to provide a recommendation to Kasbah Resources shareholders in relation to the Proposed Transaction. Responsibility for a recommendation in relation to the Proposed Transaction rests with the Directors of Kasbah Resources.

In any event, approval or rejection of the Proposed Transaction is a matter for individual shareholders based on each shareholder's views as to the value of Kasbah Resources, expectations about future market conditions and their particular circumstances including risk profile, liquidity preference, investment strategy, portfolio structure and tax position. Kasbah Resources shareholders who are in any doubt as to the action that they should take in relation to the Proposed Transaction should consult their own professional adviser.

7 Qualifications, Declarations and Consents

7.1 Qualifications

Sumner Hall is a specialist advisory firm providing corporate advisory services in relation to mergers and acquisitions, divestments, capital raisings, corporate restructuring and financial matters generally. One of its activities is the preparation of corporate and business valuations and the provision of independent advice and expert's reports in connection with mergers, takeovers and capital reconstructions.

The person responsible for preparing this report on behalf of Sumner Hall is Mr Jeff Hall, B.Sc. (Hons), M.Com. (Hons), ACA, AICPA, CFA. Mr Hall is a Director of Sumner Hall and has over thirty years experience in relevant corporate advisory matters. Mr Hall is the key person of Sumner Hall in relation to its AFS License No. 231214 issued pursuant to section 913B of the Corporations Act.

7.2 Independent Technical Specialist's Report

AMC has been appointed to prepare an independent technical specialist's report. AMC has the appropriate qualifications and experience to prepare the independent technical specialist's report (further details of these qualifications are set out in AMC's report). Summer Hall has considered and relied upon AMC's report. The approaches that were adopted and the assumptions that were made in arriving at the conclusions that have been reached in AMC's report are considered appropriate for use in Summer Hall's independent expert's report. A copy of AMC's independent technical specialist's report is included as Annexure C to this report.

7.3 Disclaimers

It is not intended that this report should be used or relied upon for any purpose other than as an expression of Sumner Hall's opinion as to whether the Proposed Transaction is fair and reasonable, having regard to the interests of Kasbah Resources shareholders other than Pala Investments. This opinion relates to Kasbah Resources shareholders as a whole and it does not take into account the risk profile, personal objectives or financial situation of individual shareholders. Shareholders should consider the appropriateness of this report having regard to their own circumstances before making any decisions in relation to the Proposed Transaction. Shareholders should also consider all other parts of the Notice of Meeting before making any decisions in relation to the Proposed Transaction. Sumner Hall expressly disclaims any liability to any Kasbah Resources shareholder who relies or purports to rely on this report for any other purpose and to any other party who relies or purports to rely on this report for any purpose whatsoever.

Sumner Hall has had no involvement in the preparation of the Notice of Meeting and has not verified or approved any of the contents of the Notice of Meeting. Sumner Hall does not accept any responsibility for the contents of the Notice of Meeting except for this independent expert's report.

This report has been prepared by Sumner Hall with care and diligence and the statements and opinions given by Sumner Hall in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading. However, no responsibility is accepted by Sumner Hall or any of its officers or employees for errors or omissions however arising in the preparation of this report, provided that this shall not absolve Sumner Hall from liability arising from an opinion expressed recklessly or in bad faith.

7.4 Independence

Sumner Hall does not have at the date of this report, and has not had within the previous two years (or at any previous time), any shareholding in or other relationship with Kasbah Resources that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the Proposed Transaction.

Sumner Hall was not involved in the formulation of the Proposed Transaction. Sumner Hall's only role has been the preparation of this independent expert's report.

Sumner Hall will receive a fixed fee of \$60,000 for the preparation of this report. This fee is not contingent on the conclusions reached or the outcome of the Proposed Transaction. Sumner Hall's out-

of-pocket expenses in relation to the preparation of this report will also be reimbursed. Sumner Hall will not receive any other benefit for the preparation of this report.

Sumner Hall considers itself to be independent in terms of Regulatory Guide 112 published by ASIC.

7.5 Declarations

An advance draft of this report was provided to Kasbah Resources and its advisers. Certain changes were made to this report as a result of the circulation of the draft report. No alterations were made to the methodology or conclusions as a result of circulating the draft report.

Kasbah Resources has agreed that, to the extent permitted by law, it will indemnify Sumner Hall and its employees and officers in respect of any liability suffered or incurred as a result of or in connection with the preparation of this report. This indemnity will not apply to the extent that any liability suffered is caused by the negligence, fraud, breach of contract or willful misconduct of Sumner Hall. Kasbah Resources has also agreed to indemnify Sumner Hall and its employees and officers for time incurred and any costs in relation to any inquiry or proceeding initiated by any person. Where Sumner Hall or its employees and officers are found to have been negligent, fraudulent, in breach of contract or engaged in willful misconduct then Sumner Hall shall bear the proportion of such costs caused by its actions.

7.6 Financial Services Guide

Sumner Hall has prepared a Financial Services Guide in relation to this report. Sumner Hall's Financial Services Guide is included as Annexure D to this report.

7.7 Consents

Sumner Hall consents to the issuing of this report in the form and context in which it is to be included in the Notice of Meeting to be sent to shareholders of Kasbah Resources. Neither the whole nor any part of this report nor any reference thereto may be included in any other document without the prior written consent of Sumner Hall as to the form and context in which it appears.



Annexure A – Market Evidence Regarding Tin Projects

| Annexure A - Market Evidence | Regarding Select | ted Tin Companies | s and Projects | | | | | | | | | | | | | |
|----------------------------------|-------------------------------------|--------------------------------------|-----------------------------|----------------------------------|---|-------------------------------------|--|--|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|------------------------------|-------------------|
| | | | | | | | | | | H | in (and Tin E | quivalents) | | | Transactio | n Value |
| | | | | | Date of Comnany | | | Enternrise | Resource (mill | ion tonnes) | Grad | le | Contained Tir | ı (tonnes) – | (AS per t | onne) |
| Listed Company / Transaction | Principal Project | Location | Owner | Acquirer | Data / Data / Transaction Date | Principal Project C Ownershin | Market Zapitalisation AS millions) | Value for Tin Assets (AS millions) | Measured and Indicated | Total Resource | Measured and Indicated | Total Resource | Measured and Indicated | Total Resource | Measured and Indicated | Total Resource |
| Achmmach Tin Project - high | na | Morocco | | | | | | 72.9 | 14.9 | 14.9 | 0.85% | 0.85% | 127,300 | 127,300 | \$573 | \$573 |
| Achmmach Tin Project - low | na | Morocco | | | | | | 52.1 | 14.9 | 14.9 | 0.85% | 0.85% | 127,300 | 127,300 | \$409 | \$409 |
| Alphamin Resources Corporation | Bisie | Democrat Republic of Congo | | | Oct-18 | 80.75% | 219.8 | 253.3 | 3.7 | 4.2 | 4.52% | 4.49% | 167,960 | 186,371 | \$1,508 | \$1,359 |
| Aus Tin Mining Limited | Taronga | Australia (NSW) | | | Oct-18 | 100% | 37.6 | 39.1 | 26.9 | 36.3 | 0.17% | 0.16% | 45,200 | 57,200 | \$864 | \$683 |
| Metals X Limited | Renison | Australia (Tasmania) | | | Oct-18 | 50% | 323.9 | 111.7 | 21.0 | 21.0 | 0.78% | 0.78% | 164,500 | 164,500 | \$679 | \$679 |
| Bygoo Tin Project | na | Australia (NSW) | Thomson Resources Ltd | Rheingold Exploration Corp | Mar-17 | 51% | na | 5.4 | | 1.2 | na | 1.10% | | 12,870 | па | \$417 |
| Venture Minerals Limited | Mount Lindsay | Australia (Tasmania) | | | Oct-18 | 100% | 12.0 | 12.0 | 25.1 | 45.1 | 0.20% | 0.18% | 50,000 | 82,000 | \$239 | \$146 |
| Adex Mining Inc | Mount Pleasant | Canada | | | Oct-18 | 100% | 7.2 | 9.2 | 10.9 | 18.5 | 0.43% | 0.34% | 46,793 | 63,519 | \$196 | \$144 |
| Oropesa Tin Project | na | Spain | Eurotin Inc | Elementos Limited | Jul-18 | %96 | na | 7.4 | 9.3 | 12.5 | 0.55% | 0.54% | 50,905 | 67,520 | \$145 | \$109 |
| Elementos Lmited | Cleveland and Orepesa | Australia (Tasmania) and Spain | | | Oct-18 | 100% / 96% | 12.7 | 12.7 | 17.7 | 23.1 | 0.53% | 0.53% | 94,099 | 123,489 | \$135 | \$103 |
| TNT Mines Limited | Great Pyramid and Aberfoyle | Australia (Tasmania) | | | Oct-18 | 100% | 5.5 | 5.5 | | 8.7 | na | 0.79% | , | 69,025 | na | \$80 |
| Stellar Resources Limited | Heemskirk | Australia (Tasmania) | | | Oct-18 | 100% | 5.3 | 5.3 | 2.5 | 8.6 | 1.02% | 1.00% | 25,280 | 85,792 | \$210 | \$62 |
| Australian Tin Resources Pty Ltd | Ardlethan | Australia (NSW) | | | Oct-18 | 100% | private | na | | 37.5 | na | 0.18% | | 66,500 | na | na |
| JSC Tin One Mining | Syrymbet | Kazakhstan | | | Oct-18 | 100% | private | na | 99.2 | 99.2 | 0.49% | 0.49% | 486,080 | 486,080 | na | na |
| Tin International A.G. | Gottesberg | Germany | | | Oct-18 | 100% | private | na | 42.1 | 42.1 | 0.27% | 0.27% | 113,670 | 113,670 | na | na |
| European Metals Holdings Limited | Cinovec (principally lithium) | Czech Republic | | | Oct-18 | 100% | 52.6 | 52.6 | ш | Ħ | ш | ш | ш | E | щ | ши |
| Average | | | | | | | 75.2 | 46.7 | 19.9 | 27.5 | %06.0 | 0.84% | 95,730 | 121,426 | \$497 | \$378 |
| Median | | | | | | | 12.7 | 12.0 | 10.9 | 21.0 | 0.51% | 0.53% | 50,000 | 82,000 | \$225 | \$145 |

Annexure B – Selection of Discount Rates

Selection of Discount Rates

Overview

A nominal discount rate in the range 7-8%, in real terms, has been selected for use in the discounted cash flow valuation of the Achmmach Tin Project (before consideration of any additional specific risk premium for the stage of development that might be appropriate). These discount rates have been derived on the basis of a weighted average cost of capital ("WACC") and have been applied to ungeared after-tax cash flows.

Selection of the appropriate discount rate to apply to the forecast cash flows of any business enterprise is fundamentally a matter of judgment. The valuation of a business involves judgments about the discount rates that may be utilised by potential acquirers of that business or that are implicit in the pricing decisions of potential acquirers of the business. There is a body of theory that can be used to support that judgment. However, a mechanistic application of formulae derived from that theory can obscure the reality that there is no "correct" discount rate. Despite the growing acceptance and application of various theoretical models, it is Sumner Hall's experience that many companies rely on less sophisticated approaches. Valuation is an estimate of what real world buyers and sellers of assets would pay and must therefore reflect criteria that will be applied in practice even, to some extent, if they are not theoretically correct. The discount rates that have been adopted are reasonable relative to the rates derived from theoretical models.

There are three main elements to the determination of an appropriate WACC, namely cost of equity, cost of debt and debt/equity mix.

The cost of equity has been derived from application of the Capital Asset Pricing Model ("CAPM"). The CAPM is probably the most widely accepted and used methodology for determining the cost of equity. There are more sophisticated multivariate models that utilise additional risk factors but these models have not achieved any significant degree of usage or acceptance in practice. However, while the theory underlying the CAPM is rigorous, the practical application is subject to considerable shortcomings and limitations including, for example:

- estimation of the relevant variables, including the risk premium and beta factor, is subject to significant statistical error; and
- the model is based on expectations and the use of historical data in its practical application is merely a proxy for expectations.

Accordingly, the results of applying the CAPM should only be regarded as providing a general guide.

The cost of debt has been determined by reference to the pricing implied by debt markets. The cost of debt represents expected future returns required by debt providers funding the assets or businesses involved.

Selection of an appropriate debt/equity mix is a matter of judgment. The debt/equity mix represents an appropriate level of gearing, stated in market value terms, that potential purchasers of a business or asset would maintain in the medium to long term (over a similar period to the projected cash flow period). The relevant proportions of debt and equity have been determined after having regard to the financial gearing of the industry in general, potential purchasers and comparable companies, and judgments as to the appropriate level of gearing considering the nature and quality of the relevant cash flow streams.

Cost of Equity

The cost of equity capital has been estimated in the range 10-13%, in nominal terms, by reference to the CAPM.

The CAPM provides a theoretical basis for determining a cost of equity that reflects the systematic risks of a particular investment or business operation. Systematic risk is the risk that returns from an investment or business operation will vary with returns on the market in general. The discount rate that is appropriate for an investment that involves zero systematic risk would be equal to the risk free rate. The discount rate for investments that are not free of systematic risk is equal to the risk free rate plus a risk premium. The risk premium will be specific to each investment or business operation.

The CAPM uses a measure of systematic risk known as the beta factor. The beta factor for an investment reflects the covariance of the return from that investment with the return from the market as whole. Covariance is a measure of relative volatility and correlation. The beta of an investment represents its systematic risk only. It is not a measure of the total risk of a particular investment. An investment with a beta of more than 1.0 has more relative risk than the market and an investment with a beta factor of less than 1.0 has less relative risk.

The formula for deriving the discount rate for equity capital under the CAPM is as follows:

 $K_e = Rf + \beta(R_m - R_f)$

where: K_e is the discount rate for equity capital;

Rf is the risk free rate; β is the beta factor; R_m is the expected market return; and $R_m - R_f$ is the market risk premium.

The model, while simple, is based on a sophisticated and rigorous theoretical analysis. Nevertheless, application of the theory is not straightforward and the discount calculated should be treated as no more than a general guide.

Risk Free Rate

A risk free rate in the range 3.0-4.0%, in nominal terms, has been selected having regard to the duration of the projected cash flow streams and the current yield to maturity on 10 year US Treasury and Australian Government bonds.

Market Risk Premium

A market risk premium of 6% has been assumed. While recognising the uncertainties attached to this estimate, Sumner Hall regards this figure as within the range of generally accepted figures for long term market risk premiums.

The market risk premium $(R_m - R_f)$ represents the "extra" return that investors require to invest in equity securities as a whole over risk free investments. This is an "ex-ante" concept. It is the expected premium and as such it is not an observable phenomenon. The historical premium is therefore used as a proxy measure. The premium earned historically by equity investments is calculated over a time period of several years.

In the United States, it is generally believed that the market risk premium is in the order of 5-6% (using a geometric average). Australian studies have been more limited but indicate that the long run average premium has been in the order of 6% (using a geometric average) measured over more than 100 years of data. Even an estimate based over a long period is subject to significant statistical error. In addition, the risk premium required by the market is not constant and changes over time. At various stages of the market cycle investors perceive that equities are more risky than at other times and will increase or decrease their expected premium.

Beta Factor

A beta factor in the range 1.2-1.5 has been adopted for the Achmmach Tin Project.

The beta factor is a measure of the expected covariance (ie, volatility and correlation of returns) of an investment relative to the market as a whole. The expected beta factor cannot be observed. Conventional practice is to calculate a historical beta factor from past share price data and use it as a proxy for the future. There are very significant measurement issues with beta factors which mean that only limited reliance can be placed on such statistics. Even measurement of historical beta factors is subject to considerable variation. There is no "correct" beta and estimates of beta are commonly subject to wide confidence intervals.

Sumner Hall has considered the beta factors for selected listed mining and metals companies in determining an appropriate beta factor for the Achmmach Tin Project as set out in the following table:

| Beta Fac | tors for Selected | Listed Mining a | nd Metal | s Compa | nies | | | |
|--|--------------------------|---------------------|----------|---------|-----------|----------|---------|--------|
| | Median | Median | | S&P | Capital I | Q Beta I | Factor | |
| | Market Capitalisation | Enterprise Value | 5 Y | ear | 2 Y | ear | 1 Y | ear |
| | (US\$ millions) | (US\$ millions) | Average | Median | Average | Median | Average | Median |
| All selected companies | 719 | 812 | 1.31 | 1.09 | 1.28 | 1.18 | 1.11 | 1.05 |
| 20 largest mining and metals companies | 13,844 | 19,223 | 1.50 | 1.09 | 1.37 | 1.24 | 1.19 | 1.04 |
| Minor metals companies only | 723 | 1,019 | 1.25 | 1.09 | 1.30 | 1.21 | 1.32 | 1.28 |

The complete set of data for these mining and metals companies is included at the end of this annexure.

The selection of a beta factor in the range 1.2-1.5 reflects an overall judgment having regard to the beta factors in the above table and having regard to the nature of the Achmmach Tin Project by comparison with other listed mining and metals companies.

Cost of Equity Calculations

Using the estimates set out above, the cost of equity capital can be calculated as follows:

| | | Cost of Equity – Achmmach Tin Project |
|----------------|--|---|
| | Low | High |
| K _e | $= R_{f} + Beta (R_{m} - R_{f})$ = 3.0% + 1.2 * (6.0%) = 10.2% | $K_e = R_f + Beta (R_m - R_f) = 4.0\% + 1.5 * (6.0\%) = 13.0\%$ |

Cost of Debt

A pre-tax cost of debt in the range 6-7% has been utilised for the purpose of estimating the weighted average cost of capital. This figure represents total expected future borrowing costs over the forecast period and assumes that a potential purchaser would be able to obtain a mixture of short term and long term debt at an average of 300 basis points over the risk free rate.

Debt/Equity Mix

A debt/equity mix of 30-40% debt / 70-60% equity has been utilised for the purpose of this report. This reflects the debt to total capital ratios for Sumner Hall's selection of mining and metals companies (as set out in detail in the complete set of data at the end of this annexure) as summarised below:

- an average debt ratio of 37% and a median debt ratio of 32% for all of the selected companies;
- an average debt ratio of 39% and a median debt ratio of 36% for the 20 largest companies; and
- an average debt ratio of 42% and a median debt ratio of 40% for the minor metals companies.

The tax deductibility of the cost of debt means that the higher the proportion of debt the lower the WACC although this would be offset, at least in part, by an increase in the beta factor as leverage increases. The debt/equity mix should be consistent with the level implicit in the measurement of the beta factor. The measured beta factors for listed companies are equity betas and reflect the financial leverage of the individual companies. It is therefore necessary to reflect the debt/equity mix in calculating the WACC. This is, however, a highly subjective exercise. Alternatively, it is possible to deleverage beta factors to derive asset betas and then releverage the asset betas to reflect a more appropriate or comparable capital structure. In Sumner Hall's opinion, this process is subject to considerable estimation error. Deleveraging and releveraging beta factors exacerbates the estimation errors in the original beta factor calculation and gives a misleading impression of the precision of the methodology. Deleveraging and releveraging is also often incorrectly calculated based on gearing levels at a single point in time.

Weighted Average Cost of Capital

The formula conventionally used to calculate an after-tax WACC is as follows:

$$WACC = \left[\frac{E}{V} \times K_e\right] + \left[\frac{D}{V} \times \left(K_{d\times} \times (1-t)\right)\right]_e$$

where: E/V is the proportion of equity in the debt/equity mix;

D/V is the proportion of debt in the debt/equity mix;

K_e is the after-tax cost of equity;

K_d is the pre-tax cost of debt; and

t is the corporate tax rate.

On the basis of the parameters outlined above, and assuming a corporate tax rate of 20% (reflecting the Moroccan corporate tax rate of 17.5% and the higher rates applicable to potential purchasers in their home countries), the WACC is estimated as follows:

| WACC – Based on a Gearing | ng Ratio of 30% Debt and 70% Equity |
|--|---|
| Low | High |
| WACC (nominal) = 70% * 10.2% + 30% * 6% * (1-20%) = 8.6% | WACC (nominal) = 70% * 12.4% + 30% * 7% * (1-20%) = 10.4% |
| | |
| WACC – Based on a Geari | ng Ratio of 40% Debt and 60% Equity |
| Low | High |
| WACC (nominal) = 60% * 10.2% + 40% * 6% * (1-20%) = 8.0% | WACC (nominal) = 60% * 12.4% + 40% * 7% * (1-20%) = 9.7% |

Based on this information, a discount rate in the range 9-10% in nominal terms, equivalent to 7-8% in real terms, has been utilised for the purpose of this report.

| Analysis of Beta Factors and Gearing Ratios | | | | | | | | | |
|---|------------------|-----------------------|--|----------------|---------------------|------------|------------|-------------|---------------|
| | Stock | Evchange | Principal Mineral / Tyne | Market | Enterprise Value | ď | eta Factor | | Daht to |
| Company Name | Ticker | Location | of Operations | (USS millions) | (USS millions) | 5 Year | 2 Year | Year | Total Capital |
| BHP Billiton Limited | BHP | ASX | Diversified mining | 115.151 | 136.050 | 1.1 | 1.4 | 0.7 | 31% |
| Rio Tinto Limited | RIO | ASX | Diversified mining | 97,077 | 107,135 | 6.0 | 1.1 | 0.6 | 23% |
| Glencore Plc | GLEN | London | Diversified mining | 70,973 | 103,651 | 1.5 | 1.7 | 1.3 | 41% |
| Southern Copper Corporation | SCCO | New York | Copper and gold | 41,883 | 46,826 | 0.5 | 1.2 | 0.8 | 49% 2007 |
| Augio American pic Public Ioint Stock Comnany Norilsk Nickel | MNOD | London | Diversined mining Nickel | 29,331 | 37769 | 0.1 | 10 | 0.8 | 66% |
| Freebort-McMoRan Inc. | FCX | New York | Copper and gold | 25,439 | 37.376 | 2.4 | 1.6 | 1.0 | 54% |
| Grupo México, S.A.B. de C.V. | GMEXICO B | Mexico | Copper and gold | 25,766 | 33,311 | 0.7 | 0.8 | 0.0 | 38% |
| China Molybdenum Co., Ltd. | 3993 | Hong Kong | Molybdenum metals | 26,844 | 29,173 | 1.2 | 0.9 | 2.0 | 43% |
| Vedanta Resources plc | VED | London | Oil and gas, coal, base metals | 2,774 | 19,369 | 1.9 | 1.7 | 1.7 | 71% |
| Teck Resources Limited | TECK.B | Toronto | Coal, copper and base metals | 14,768 | 19,076 | 3.6 | 2.1 | 1.9 | 25% |
| First Quantum Minerals Ltd. | FM | Toronto | Copper, nickel and zinc | 9,665 | 16,218 | 4.7 | 3.2 | 3.0 | 40% |
| Antofagasta plc | ANTO | London | Copper and gold | 12,740 | 15,106 | 0.6 | 1.3 | 0.8 | 23% |
| MMG Limited | 1208 | Hong Kong | Copper, gold, silver, nickel, zinc and lead | 4,904 | 14,876 | 0.9 | 1.8 | 1.9 | 76% |
| Sumitomo Metal Mining Co., Ltd. | 5713 | Tokyo | Copper, nickel, zinc and chemicals | 11,592 | 14,741 | 1.1 | 1.6 | 1.4 | 28% |
| Sociedad Quimica y Minera de Chile S.A. | SQM | New York | Lithium and industrial chemicals | 12,920 | 13,240 | 1.1 | 0.9 | 1.0 | 34% |
| FMC Corporation | FMC | New York | Lithium and diversified chemicals | 10,253 | 13,203 | 1.6 | 1.1 | 1.1 | 53% |
| South32 Limited | S32 | ASX | Bauxite, coal, manganese, lead and zinc | 12,709 | 11,183 | 1.8 | 0.6 | 0.1 | 9% |
| Albemarle Corporation | ALB | New York | Lithium and speciality chemicals | 10,012 | 10,855 | 1.7 | 1.1 | 1.2 | 31% |
| Sociedad Minera Cerro Verde S.A.A. | CVERDECI | Peru | Copper and molybdenum | 10,152 | 10,820 | 6.0 | 0.6 | 0.7 | 20% |
| Boliden AB | BOL | Stockholm | Zinc, lead, copper and tellurium | 9,561 | 006'6 | 1.1 | 0.7 | 0.6 | 13% |
| Jiangxi Copper Company Limited | 358 | Hong Kong | Copper | 7,702 | 8,836 | 0.6 | 1.2 | 1.2 | 33% |
| KAZ Minerals PLC | KAZ | London | Copper | 5,378 | 7,525 | 1.8 | 1.7 | 1.3 | 80% |
| Anglo American Platinum Limited | AMS | Johannesburg | Platinum group metals | 7,168 | 7,298 | 0.7 | 1.1 | 0.8 | 21% |
| KGHM Polska Miedz Spółka Akcyjna | KGH | Warsaw | Copper | 5,067 | 6,946 | 13 | 1.2 | 1.1 | 29% |
| Polymetal International Plc | POLY | London | Gold, silver, copper and zinc | 4,431 | 5,905 | 0.1 | 0.9 | 1.0 | 53% |
| Katanga Mining Limited | KAT | Toronto | Cobalt and copper | 2,602 | 5,291 | 1.0 | 2.3 | 2.9 | 101% |
| Mitsui Mining and Smelting Company, Limited | 5706 | Tokyo | Zinc, nickel, lithium oxide, manganese | 2,597 | 4,577 | 1.5 | 1.2 | 0.8 | 53% |
| ERAMET S.A. | ERA | Euronext | Nickel, cobalt and manganese | 3,641 | 4,299 | 1.6 | 2.4 | 2.2 | 54% |
| Cameco Corporation | CCO | Toronto | Uranium | 3,592 | 4,292 | 1.0 | 1.5 | 1.4 | 24% |
| Lundin Mining Corporation | LUN | Toronto | Copper, zinc and nickel | 4,781 | 4,165 | 2.5 | 2.6 | 2.3 | 10% |
| Iluka Resources Limited | ILU | ASX | Mineral sands | 3,384 | 3,524 | 0.8 | 0.8 | 0.2 | 21% |
| Minera Frisco, S.A.B. de C.V. | MFRISCO A-1 | Mexico | Copper, lead and zinc | 1,489 | 2,829 | 6.0 | 0.8 | 0.5 | 62% |
| Hudbay Minerals Inc. | HBM | Toronto | Copper, gold, silver and zinc | 1,847 | 2,534 | 3.8 | 2.8 | 2.5 | 33% |
| Ferroglobe PLC | GSM | NASDAQ | Silicon, manganese and speciality metals | 1,845 | 2,152 | 1.2 | 1.9 | 1.5 | 37% |
| Independence Group NL | IGO | ASX | Copper, gold, silver and zinc | 2,070 | 2,149 | 1.6 | 1.2 | 1.0 | 9% |
| Nyrstar NV | NYR | Euronext | Zinc, lead and copper | 766 | 2,111 | (0.0) | 1.3 | 1.2 | 64% |
| Impala Platinum Holdings Limited | IMP | Johannesburg | Platinum group metals | 1,395 | 2,023 | 1.5 | 1.3 | 1.0 | 16% |
| Compañía Minera Milpo S.A.A. | MILPOC1 | Peru | Copper, gold, zinc and lead | 2,123 | 1,964 | 1.1 | 0.6 | 0.3 | 36% |
| Northam Platinum Limited | MHM | Johannesburg | Platinum group metals | 1,073 | 1,960 | 1.2 | 0.7 | 0.5 | 58% |
| African Kainbow Minerals Limited | AKI | Johannesburg | Platinum group metals and manganese | 1,635 | 1,858 | 0.8 | 1.2 | 1.0 | 11% |
| Minsur S.A. | MINSURI | reru | Lin and gold | 1,248 | 1,694 | 9.0 9.0 | 0.7 | 0.0 | 33% 260 |
| Jinchuan Group International Resources Co. Ltd | 2362 | Hong Kong | Copper, cobalt and nickel | 050,1 211 | 175,1 | 0.2 | 0.3 | 0.0 | 30% 700/ |
| China Daye Non-Ferrous Metals Mining Limited | 661 5202 | Hong Kong | Copper, gold, iron and molybdenum | 214 | 1,4/5 | c.0 | 0.9 | 71 | /8%0 |
| loho Zine Co., Ltd. | 5707 075 | Tokyo | Zinc | 64 / 1 070 | 1,001 | 1.1 | 1.6 | <u>.1</u> . | 4 /% |
| Orocobre Limited | OKE | ASX | Lithium and boron | 1,072 | 1,019 | 0.0 | 0.6 | 1.6 | 0%0 |
| Materion Corporation | MTRN | New York | Copper, nickel, aluminium, beryllium | 1,029 | 991 | 1.0 | 1.4 | 1.2 | 1% |
| Trevali Mining Corporation | , Tv | Toronto | Copper, gold, zinc and lead | 835 | 936 | 4.6 | 3.0 | 1.6 | 18% |
| Sherritt International Corporation | s | Toronto | Nickel | 348 | 829 | 33 | 2.6 | 2.2 | 74% |
| Imperial Metals Corporation | | Toronto | Copper, gold, zinc and lead | 194 | 812 | 2.0 | 2.0 | 1.5 2 | 62% |
| Sandfire Resources NL | SFR | ASX | Copper, gold and silver | 888 | 766 | 0.7 | 1.1 | 0.7 | %0 |
| Nevsun Resources Ltd. | | Toronto | Copper, gold, silver and zinc | 617 757 | 743 | 8.1 8.0 | 7. K | 12 | |
| Central Asia Metals Fic | | London ALM Taranta | Copper Viewadium tumeetan and molyhdanum | 101 | 271 | 7.0 | 7.1 C | 1.1 | 769/ |
| Latgo Kesources Líu. Svrah Resources Limited | SVR | LOTOTICO | Vähädiumi, tungsten änd motyouenum Grawhite and vanadiitm | 000 223 | دu/ 614 | 0.0 1 | 0.4 0.6 | 0 L L | ۰/۵/ ۱۵% |
| оудан кезочи сез глилиса Altura Mining Limited | AIM | ASX | Chapture and vanadum. Chal and lithium | 586 | 610 610 | 0.1 | u.> 1.6 | 15 15 | 58% |
| Kidman Resources Limited | KDR | ASX | Gold, lithium, zinc, lead and copper | 578 | 579 | 1.4 | 1.7 | 0.2 | 31% |

| Allalysis of Deta Factors and Ocaling Mattos | | | | | | | | | |
|--|--------|--------------------|--|--------------------------|---------------------|--------------|-------------|--------------|---------------|
| | Sto | ck Exchance | Principal Mineral / Tyne | Market Canitalisation | Enterprise Value | ~ | teta Factor | | Deht to |
| Company Name | Ticker | Location | of Operations | (USS millions) | (USS millions) | 5 Year | 2 Year | 1 Year | Total Capital |
| CITIC Dameng Holdings Limited | 1091 | Hong Kong | Manganese | 177 | 577 | 1.1 | 1.6 | 1.8 | 56% |
| Xinjiang Xinxin Mining Industry Co., Ltd. | 3833 | Hong Kong | Copper, gold, nickel and cobalt | 293 | 569 | 0.5 | 1.4 | 1.4 | 33% |
| Lucara Diamond Corp. | LUC | Toronto | Diamonds | 616 | 557 | 2.2 | 0.9 | 0.8 | |
| Western Areas Limited | WSA | ASX | Nickel and nickel sulphide | 655 | 553 | 1.4 | 1.5 | 1.2 | %0 |
| Zimplats Holdings Limited | MIZ | ASX | Platinum group metals | 556 120 | 534 | 9.0 2.5 | 4. c | 0.0 1.c | %8 |
| Norm American Pauladium Lid. Tecebo Minee Limited | TVO | Loronto Toronto | Platinum group and precious metals | 454 268 | 49/ 150 | 77 | 77 | 1.0 9.0 | 10%0 |
| Tasero Munes Limited Conner Mountain Mining Cornoration | CMMC | Toronto | Copper, gord, more buching and mouthin Conner cold and eilver | 174 | 104 | 1. T | | 0.7 | 57% |
| New Century Resources Limited | NCZ | ASX | Coppet, gota and silver Coal lead zine and silver | 435 | 304 | 80 | 0 8 O | i | |
| Kenmare Recources units | KMR | I ondon | Titanium zircon and ilmenite | 348 | 383 | 16 | 1.1 | 80 | 11% |
| AVZ Minerals Limited | AVZ | ASX | Lithium tantalum and tin | 365 | 363 | 1.1 | 1.5 | 2.1 | |
| Atalava Mining nlc | ATYM | London AIM | Conner | 404 | 356 | 0.1 | 0.6 | 0.2 | |
| Compagnie Minière de Touissit S.A. | CMT | Morocco | Conner. gold. silver. zinc and lead | 327 | 326 | 0.8 | 0.3 | 0.3 | 27% |
| Griffin Mining Limited | GFM | London AIM | Gold. silver. zinc and lead | 295 | 321 | 0.7 | 0.7 | 1.0 | 20% |
| Metals X Limited | MLX | ASX | Conner tin and nickel | 338 | 312 | . [] | 0.7 | 13 | 4% |
| Gem Diamonds Limited | GEMD | London | Diamonds | 175 | 263 | 0.2 | 0.7 | 0.7 | 16% |
| Denison Mines Corp. | DML | Toronto | Uranium | 251 | 219 | 1.9 | 1.8 | 1.2 | |
| Wolf Minerals Limited | WLF | ASX | Tungsten and tin | 48 | 199 | 1.5 | 1.2 | 1.0 | 72% |
| Finders Resources Limited | FND | ASX | Copper | 103 | 198 | 1.5 | 0.3 | 0.6 | 41% |
| Panoramic Resources Limited | PAN | ASX | Gold, nickel and platinum group metals | 173 | 175 | 2.7 | 1.8 | 0.3 | %0 |
| China Polymetallic Mining Limited | 2133 | Hong Kong | Lead, zinc and silver | 52 | 155 | 1.1 | 0.6 | 0.0 | 19% |
| Weatherly International plc | MTI | London AIM | Copper | 19 | 142 | 0.0 | 2.4 | 1.9 | 115% |
| Hastings Technology Metals Limited | HAS | ASX | Rare earth elements | 153 | 142 | 0.9 | 0.6 | 1.2 | |
| Energy Fuels Inc. | EFR | Toronto | Uranium | 127 | 140 | 0.0 | 1.3 | 0.0 | 18% |
| Atlatsa Resources Corporation | ATL | Toronto | Platinum group metals | 17 | 134 | 1.8 | 1.7 | 3.1 | 207% |
| CI Kesources Limited | E | ASX | Phosphate rock | 7CI | 113 | 0.4 | 0.1 | 5.0 5 F | 0%0 2387 |
| Ur-Energy Inc. Shofffold Docourses I imited | UKE | I OTONIO A S V | Uranium Minand conde | /8 201 | 101 | (0.0) 1 A | c.1 | 7.1 | 53%0 |
| TNG I imited | TNG | VCA | Muncial sands Vanadium titanium iron ora laad and zino | 102 | 101 | + | 1.0 | 0.0 | |
| Vast Resources nlc | VAST | London AIM | Conner gold lead and zinc | 45 | 95 | 0.1 | 0.0 7 | 7 O | 58% |
| Red River Resources Limited | RVR | ASX | Conner gold silver zinc and lead | 2: II | 63 | 01 |); [[| 0.7 | 1% |
| Greentech Technology International Limited | 195 | Hong Kong | Copper, gord, and concerned rough | 86 | 88 | 1.1 | 0.5 | 14 | 16% |
| Lenidico Limited | TPD | ASX | Lithium | 16 | 85 | 0.4 | 0.8 | 1.1 | |
| Northern Minerals Limited | NTU | ASX | Rare earth elements | 70 | 75 | 0.6 | 0.4 | 0.1 | 39% |
| Prosnect Resources Limited | PSC | ASX | Lithium and sold | 27 | 74 | 0.2 | 16 | 13 | |
| RNC Minerals | RNX | Toronto | Copper. gold. nickel and platinum group metals | 69 | 73 | 2.7 | 0.7 | 0.6 | 20% |
| Celsius Resources Limited | CLA | ASX | Cobalt and nickel | 64 | 61 | 0.0 | 1.3 | 1.5 | |
| Sylvania Platinum Limited | SLP | London AIM | Platinum group metals | 73 | 61 | 0.5 | 0.3 | (0.0) | %0 |
| Greenland Minerals and Energy Limited | GGG | ASX | Rare earth elements, zinc and uranium | 68 | 60 | 1.5 | 0.8 | 0.1 | |
| Peninsula Energy Limited | PEN | ASX | Uranium | 42 | 58 | 0.9 | 1.1 | (0.0) 0.0 | 21% |
| Applied Minerals, Inc. | AMNL | New York UIC | Aluminosilicate clay and iron oxide | 7.7 | 22 | 7.1 | 0.9 | 0.3 | 10. |
| Juditee Metals Group PLC | JLF | London ALM | Flatinum group and precious metals | 48 | 10 | 0.0 | 0.8 | 0.8 | 4%0 |
| Average of all companies | | | | 6,783 | 8,586 | 1.31 | 1.28 | 1.11 | 37% |
| Median for all companies | | | | 719 | 812 | 1.09 | 1.18 | 1.05 | 32% |
| | | | | | | | | | |
| 20 largest companies: | | | | 010 01 | 30.666 | 1 50 | 1 27 | 1 10 | 300/ |
| Average | | | | 12 044 | 660,0C | 1 00 | /c.1 | 1.17 | 0/260 |
| Median | | | | 13,844 | 677,61 | 1.09 | 1.24 | 1.04 | 30%0 |
| Minor metals companies: | | | | | | | | | |
| Average | | | | 3,758 | 4,284 | 1.25 | 1.30 | 1.32 | 42% |
| Median | | | | 723 | 1,019 | 1.09 | 1.21 | 1.28 | 40% |

Annexure C – Independent Technical Specialist's Report by AMC Consultants Pty Ltd

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Independent Technical Specialist's Report

Kasbah Resources Limited

AMC Project 318054 1 November 2018

Unearth a ⁹⁰marter way

1 November 2018

Sumner Hall Associates Pty Limited 48 Darling Point Road Darling Point NSW 2027 AUSTRALIA

Independent Technical Specialist's Report Kasbah Resources Limited

Dear Sirs

The Directors of Kasbah Resources Limited (Kasbah Resources or Kasbah) have appointed Sumner Hall Associates Pty Ltd (Sumner Hall) to prepare an Independent Expert's Report¹ (IER) in relation to a proposed transaction involving the acquisition of an interest in more than 20% of the shares in Kasbah Resources.

AMC Consultants Pty Ltd (AMC) was engaged by Kasbah Resources as an Independent Technical Specialist¹ to provide independent technical advice to Sumner Hall in relation to the mineral assets held by Kasbah Resources. To this end Sumner Hall has instructed AMC to prepare this Independent Technical Specialist's Report¹ (ITS Report) as an appendix to the IER on the following Mineral Assets in Morocco in which Kasbah has an interest:

- The Achmmach Tin Project (the Achmmach Project).
- The mineral tenements hosting the Bou El Jaj exploration prospect (the Bou El Jaj Prospect).
- Tamlalt gold exploration prospect (the Tamlalt Prospect).

Sumner Hall instructed AMC to review the relevant available data and reports relating to the Mineral Assets and to provide the following:

- A brief description of the key characteristics of the Achmmach Project, considering and where necessary referencing the descriptions that are set out in the Kasbah Resources 2018 Annual Report or the Kasbah Resources announcement to its shareholders regarding the 2018 definitive feasibility study (the Achmmach 2018 DFS).
- An opinion as to the reasonableness (within a range if necessary) of the following key parameters for the Achmmach Project based on the results of the Achmmach 2018 DFS where applicable:
 - The size and quality of the Mineral Resource and Ore Reserve estimates.
 - The anticipated timing for development of the Achmmach Project.
 - The expected production profiles.
 - The initial and sustaining capital cost estimates.
 - The estimated operating costs.

¹ As defined under Section D10 of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (The VALMIN Code), 2005.

- Should AMC consider one or more of these parameters to be not reasonable, AMC should set out the basis upon which the relevant figures should be adjusted and the adjusted figures that AMC regards as reasonable.
- Provide a brief description and a valuation (within a range) of the Bou El Jaj Prospect and the Tamlalt Prospect using exploration asset valuation methods.

AMC has undertaken its engagement as an Independent Technical Specialist in accordance with the VALMIN Code² to the extent that the code is relevant to AMC's engagement.

In addressing the scope of work, AMC has reviewed the geological, mining, ore processing and infrastructure aspects of the Achmmach Project. AMC has also reviewed the implementation plan and schedule for the project together with the capital and operating cost estimates. AMC has not reviewed sovereign risk or the environmental and social aspects of the Achmmach Project, nor has it verified the standing of the tenements or reviewed the permitting aspects of the project. AMC understands that the standing of the tenements will be verified by others. AMC has not reviewed or commented on matters relating to marketing, royalties, commodity prices, exchange rates, taxation, inflation or discount rates.

AMC visited the site of the Achmmach Project on 28 and 29 September 2018. During the visit AMC inspected selected drill core and drill logs from the Achmmach exploration programme, inspected the access road to site, the proposed locations of the process plant, mine portals, tailings storage area and the site of the proposed process water collection and storage area. AMC also communicated with geological and management staff at site.

AMC has not visited the Bou El Jaj and Tamlalt Prospects because Kasbah has reported there is currently no activity at either site. AMC is satisfied that sufficient information is available for it to make an informed appraisal of the two prospects without a site visit.

AMC has prepared a production and cost scenario for the Achmmach Project (the AMC Production Case) for use by Sumner Hall in determining a value for the Achmmach Project. The AMC Production Case is based on the life-of-mine production and cost model prepared by Kasbah Resources as part of the Achmmach 2018 DFS (the Achmmach DFS Cost Model). In preparing the AMC Production Case AMC has used many of the input values from the Achmmach DFS Cost Model. But where AMC believes there are reasonable grounds to do so it has adjusted certain inputs values to ensure that the AMC Production Case provides a sound technical basis for valuing the project. The AMC Production Case, including the adjustments made by AMC, is described in the body of the ITS Report. In AMC's opinion, the AMC Production Case is based on reasonable grounds and assumptions.

Kasbah Resources has provided AMC with access to relevant technical, financial and other information required by AMC for the purposes of preparing this ITS Report. References to the key sources of information provided by Kasbah Resources are provided in Section 14 of this ITS Report. AMC has not audited the information provided to it but has aimed to satisfy itself that the information has been prepared in accordance with proper industry standards and is based on data that AMC considers to be of acceptable quality and reliability. Where this is not the case, AMC has commented to this effect in the ITS Report and taken account of these matters in determining the AMC Production Case. In addition to using information provided by Kasbah to prepare this ITS Report, AMC has used information within its own knowledge and/or acquired because of its investigations.

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² Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports, The VALMIN Code 2005 Edition, Prepared by The VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Mineral industry Consultants Association with the participation of the Australian Securities and Investment Commission, the Australian Stock Exchange Limited, the Minerals Council of Australia, the Petroleum Exploration Society of Australia, the Securities Association of Australia and representatives from the Australian finance sector.

AMC has used non-income-based exploration valuation methods, specifically comparable transactions, multiples of exploration expenditure, and the value of current sales agreements to assign a Technical Value to the Bou El Jaj and Tamlalt Prospects.

All monetary figures in this ITS Report are expressed in United States dollars (\$), unless otherwise noted. Costs are presented on a cash cost basis unless otherwise specified. Production physicals and costs in this ITS Report are presented on a financial year (1 July to 30 June) basis unless otherwise specified.

This ITS Report and the conclusions in it are effective at 31 October 2018. Those conclusions may change in the future because of further exploration and technical investigations, changes in the tin price, the market conditions for tin concentrate and for mineral properties, and the general economic environment

Yours sincerely

Mike Thomas Principal Consultant

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1 Introduction

1.1 Location of the mineral assets

The principal asset of Kasbah Resources is a 75% interest in Atlas Tin SAS (Atlas Tin or Atlas), a joint venture company that holds the Achmmach Project. Other participants in the joint venture are Toyota Tsusho Corporation (20%) and Nittetsu Mining Co. Ltd (5%). In addition to its interest in Atlas Tin, Kasbah Resources also has a 100% interest in the Bou El Jaj and Tamlalt exploration prospects.

The Achmmach Project is located approximately 40 km south-west of the city of Meknès in central northern Morocco. The location of the Achmmach Project and the exploration prospects, excluding the Tamlalt Prospect, which is approximately 65 km to the south of the Achmmach Project, is shown in Figure 1.1.

Kasbah Resources has the exploration and mining rights for two Exploitation Permits (PE2912 and PE193172) covering an area of 32 km². The Achmmach deposit lies in the south east of Exploitation Permit PE2912. A fluorite mine operated by the government-owned company lies on the adjacent tenements to the west of Achmmach deposit.

The tenements are in rugged terrain featuring woodland as well as cleared areas used for agriculture. The region has a warm and temperate Mediterranean climate. The winter months are generally much wetter than the summer months and the average annual rainfall is approximately 700 mm.

The Achmmach Project is at an altitude of approximately 1,000 m above mean sea level and is currently accessed from for the city of Meknès via 35 km of sealed road to the town of Agourai then by a further 20 km of unsealed rural road.

The Bou El Jaj Prospect is approximately 8 km directly to the south west of the Achmmach Project and 15 km by road.



Figure 1.1 Location of the Achmmach Project the Bou El Jaj Prospects

1.2 Overview of the Achmmach Project

1.2.1 Geology

The deposit is hosted within a tightly-folded sequence of turbidite beds that was overprinted by tourmaline alteration within sheared regions and intruded by magmatic sills. Mineralisation is localised in two subparallel east-north-east striking trends named the Meknès and Sidi Addi Trends (Figure 1.2). The trends are separated laterally by approximately 500 m. The largest part of the resource lies within the Meknès Trend. The Sidi Addi Trend hosts a smaller resource (the Western Zone). The mineralisation is developed within the tourmaline-silica altered metasediments. Tin mineralisation occurs primarily as cassiterite with minor stannite.

Figure 1.2 Plan view of the Achmmach Project tin mineralised trends



1.2.2 Mining

The planned underground mine involves construction of two access portals; a central portal and the eastern portal. Underground development is planned to be carried out using conventional drill-andblast techniques using modern mining equipment. Several different stoping methods are proposed, some requiring the use of backfill and some requiring the leaving of pillars to support the hangingwalls and footwalls. No caving methods and no open pit mining methods are proposed.

Stopes are to be mined using conventional drill-and-blast techniques. Ore will be loaded from the stope using underground load-haul-dump (LHD) equipment. Both conventional and remote-control operation of the LHDs is proposed. Broken ore will be hauled out of the mine via declines and portals using a fleet of diesel-powered haul trucks designed for underground use.

An annual ore production rate of 750 ktpa is proposed over a nominal 10-year period. Uncrushed ore will be delivered to a run-of-mine (ROM) stockpile adjacent to the surface crushing and screening plant.

1.2.3 Processing

It is envisaged that ore delivered to surface will be dumped in separate stockpiles before being blended using a front-end loader and fed to a run-of-mine ore bin at the head of the crushing plant.

A two-stage conventional crushing plant is proposed producing a minus 32 mm crushed product. Crushed ore will be screened with the plus 8 mm oversize fed to an ore sorter. The ore sorter will identify and separate un-mineralised or weakly mineralised rocks (waste) from rocks containing high-grade tin. It is envisaged that up to 40% of the feed to the ore sorter will be rejected as waste.

The use of ore sorting process enables the remaining ore processing plant to be sized to handle a smaller throughput capacity than the 750 ktpa that would otherwise be required.

The high-grade ore from the ore sorter combined with the undersize from the screen will be fed to a tertiary crushing process using a high pressure grinding roll (HPGR) crusher. The tertiary crushed product will pass to a ball mill designed to feed a nominal 150 μ m product to the downstream ore processing plant.

Separation of tin minerals, principally cassiterite, is achieved using a combination of gravity separation processes (spirals and tables) and conventional mineral flotation technology. After the initial removal of a clean coarse fraction by gravity separation, the remaining material is reground to minus 45 μ m. Flotation is used to first remove sulphide minerals and then to concentrate tin minerals. To maximise recovery and grade of tin from the fine and ultra-fine particles high-intensity gravity separators are to be used.

To produce the planned 60% tin concentrate, low-intensity and high-intensity magnetic separation equipment is proposed. Concentrates will be filtered then bagged and dispatched from site in standard shipping containers for export to overseas customers.

1.2.4 Infrastructure

Waste materials from the mining and processing operation will include rock from mine development, rejects from the ore sorter and tailings from the concentrator. Waste from the mine will be used for construction of the project infrastructure including dam walls, roads and ore storage pads and as underground backfill. Ore sorter rejects will also be used for backfilling and road maintenance. Approximately 1.8 Mt of waste including ore sorter rejects will remain on surface in various facilities at the end of mine life. The material used on surface is mildly acid generating and will be blended with locally sourced limestone as a neutraliser.

Approximately 5 Mt of tailings will be placed in a tailings storage facility (TSF) close to the processing plant. The TSF design is an engineered above-ground valley impoundment.

A water storage facility (WSF) designed to capture surface runoff will provide the bulk of the project water requirements. It will be constructed directly upstream of the proposed TSF using a cross-valley earthen embankment.

Power to the operation is planned to be provided via a 44 km connection to the national power grid.

1.2.5 Construction and operation

Atlas Tin plans to construct and operate the underground mine by engaging a mining contractor with international mining experience. Maximum use is planned to be made of local personnel but with some expatriate employees where necessary. Planning and design of the underground mine will be carried out by technical and management staff engaged directly by Atlas Tin.

Construction of the processing plant and infrastructure is planned to be carried out by an engineering and construction company with international experience. Atlas Tin envisage that the work would be carried out on an engineering, procurement, and construction (EPC) basis whereby the principal engineering contractor will take responsibility for providing a completed plant able to meet the planned production objectives. Once constructed, Atlas Tin envisage employing the workforce required to operate and maintain the process plant and site infrastructure.

It is planned to operate the mine and processing plant on a three 8-hour shift, 7-day week basis.

2 Geology and Mineral Resources

2.1 Mineral Resource estimate

The Mineral Resource estimate as reported by Kasbah Resources in July 2018 is shown in Table 2.1. The Mineral Resource is comprised of material from the Meknès Trend (Table 2.2), and the Western Zone of the Sidi Addi Trend (Table 2.3). The Mineral Resource estimates have been prepared by Quantitative Geoscience Pty Ltd (QG) under the direction of Mike Job a Competent Person as defined by the JORC Code³. The Mineral Resources are reported inclusive of material that comprises the Ore Reserve estimate.

Table 2.1 Total Mineral Resource estimation for the Achmmach tin deposit

| Classification | Cut-off grade (%Sn) | Mt | Grade (%Sn) | Contained tin (Kt) |
|----------------|---------------------|------|-------------|--------------------|
| Measured | 0.5 | 1.6 | 1.0 | 16.1 |
| Indicated | 0.5 | 13.3 | 0.8 | 111.2 |
| Inferred | - | - | - | - |
| Total | | 14.9 | 0.85 | 127.3 |

Notes: See following tables for modifying factors.

Table 2.2 Mineral Resource estimate - Meknès Trend

| Classification | Cut-off grade (%Sn) | Mt | Grade (%Sn) | Contained tin (Kt) |
|----------------|---------------------|------|-------------|--------------------|
| Underground | | | | |
| Measured | 0.5 | 1.6 | 1.0 | 16.1 |
| Indicated | 0.5 | 13.0 | 0.8 | 107 |
| Inferred | - | - | - | - |
| Subtotal | | 14.6 | 0.85 | 123.1 |

Notes: The following considerations in addition to geological and grade continuity, data quality and data density have been used to define the Mineral Resource estimation:

A cut-off grade of 0.35% Sn was used to estimate a small portion of the Meknès Trend that was envisaged would be 1. mined by an open pit. The pit was constrained by a Whittle pit shell with 1 Mt p.a. production rate, overall slope angles of 40°, and a total operating cost of US\$57/t, resulting in an Indicated Mineral Resource of 0.7 Mt grading 0.85% Sn.

2. A total operating cost of US\$79/t applied to the Meknès Trend Mineral Resource that was envisaged would be mined by underground methods.

3. A tin price of \$23,000/t and a metallurgical recovery of 70% at an average head grade of 0.8% Sn was used for both underground and open pit estimates.

Source: QG, 16 September 2013, Achmmach Mineral Resource Estimate, Morocco.

| Table 2.3 Mineral Resource estimate – Sidi Addi Trend - W | Vestern | Zone |
|---|---------|------|
|---|---------|------|

| Classification | Cut-off grade (%Sn) | Mt | Grade (%Sn) | Contained tin (Kt) |
|----------------|---------------------|------|-------------|--------------------|
| Measured | - | - | - | - |
| Indicated | 0.5 | 0.34 | 1.25 | 4.2 |
| Inferred | - | - | - | - |
| Total | | 0.34 | 1.25 | 4.2 |

Notes: The following considerations in addition to geological and grade continuity, data quality and data density have been used to define the Mineral Resource estimation:

A total underground operating cost of US\$79/t, a tin price of \$23,000/t and a metallurgical recovery of 80% at an 1. average head grade of 1.2% Sn.

Source: QG, 25 November 2014, Achmmach Western Zone Resource estimate.

Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition prepared by the Joint Ore Reserves Committee of The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia. amcconsultants.com 4

2.2 Regional and deposit geology

The Achmmach district is in the north-eastern part of the Late Palaeozoic Central Hercynian Massif, segmented into litho-stratigraphic domains, due to thrusting.

The mineralisation is hosted in moderate to steeply dipping Upper Devonian to Lower Carboniferous turbiditic sediments. During deformation tourmaline-silica breccia corridors formed, marked by intense poly-phase brittle deformation, alteration and cementation. Tourmaline altered lodes and breccias, ranging from about 0.5 m to 2.0 m wide, are the predominant feature of the deposit. Discordant felsic and mafic intrusive dykes cross cut the region including the mineralisation, these are not extensive.

Tourmaline-silica alteration of the host rock is controlled by porosity and permeability and, spatially, is primarily associated with brittle deformation corridors and secondary splay structures.

Within the region are several granite intrusions, the three main ones being Zaer, Oulmes and Ment. A regional gravity anomaly is inferred to relate to a yet unidentified granite body, which may constitute the source of the Achmmach mineralisation.

Tin mineralisation occurs primarily as cassiterite with minor stannite.

2.3 Exploration and discovery

The Achmmach tin deposit was discovered by the Moroccan government agency, the Bureau des et de Participations Minières (BRPM) in 1985. The BRPM explored Achmmach until 1992, completing 14,000 m of diamond core drilling and excavating an exploration shaft to a depth of 80 m, followed by crosscut and lateral development totalling approximately 870 m. Atlas Tin commenced exploration at Achmmach in 2007 and has completed a further 105,000 m of diamond core drilling up to the end the end of 2013. No mineral resource infill or definition drilling has been carried out since 2013, although a programme of geotechnical drilling was carried out.

2.4 Geological data collection and collation

The drilling, sample preparation, assaying and data validation and management procedures used by Atlas Tin have been reviewed by AMC and are summarised in the following sections.

2.4.1 Drillholes

The drill data set consists of diamond core in PQ, HQ and NQ size from 293 drillholes for a total of 88,556 m. All Meknès related drilling is diamond core. Sections are 40 m spacings along strike, and at 20 m in the Central Zone between 2370 m east and 2690 m east. No twin holes have been drilled at Achmmach.

Holes are generally drilled perpendicular to strike, often with fans of holes drilled from the same location. Core has been oriented and hole collars surveyed by a licenses surveyor. Downhole surveys are done using a Reflex multi-shot instrument on 25 m downhole intervals.

2.4.2 Sample collection and preparation

Core has been photographed wet and dry, marked-up and logged for lithology, alteration, and weathering, structural data from oriented core, and geotechnical information. For all holes drilled since drillhole AD149 core recovery has been recorded at close to 100%.

Following mark-up, core was sawn in half and samples taken at nominal 1.0 m lengths over appropriate geological intervals.

Samples for assaying were initially prepared on site, with samples being crushed to 80% passing 2 mm and rotary split to produce a 250 g sample. Samples for laboratory testing are selected using a handheld X-ray fluorescence analyser (XRF).

Core pieces for bulk density determinations were taken at regular intervals within both mineralised and non-mineralised zones, and values determined using an industry-standard water immersion technique. AMC notes that core is solid and not porous, and that the frequency of bulk density samples is high. In AMC's opinion, the bulk density data is of reasonable quality.

During AMC's site visit, AMC inspected the core handling and storage area. The core handling and storage facility was well kept and equipped. No core preparation, logging or sampling was being conducted during the site visit, and therefore the procedures were not able to be observed. However, the method of sample selection and preparation for assay, as documented and described to AMC, are rigorous and consistent with industry standards.

2.4.3 Quality assurance / quality control of assays

Samples have been routinely assayed at a commercial geochemistry laboratory in Ireland (ALS Global). Each sample is pulverized to 85% passing 75 μ m, to produce a 25 g charge, and tin is assayed using fused bead preparations with XRF determination. Quality assurance and Quality control (QA/QC) checks are carried out as part of the standard laboratory procedures.

Samples of certified reference material, duplicates, and blanks have been routinely inserted into the sample stream at rates of between 1:20 and 1:50 according to type. In addition, 3% of pulp duplicates have been analysed externally by independent laboratory, Amdel (Bureau Veritas), in Perth.

Data collection, validation, management and security activities are conducted by geologists according to documented procedures, using data entry and storage systems, into a structured query language (SQL) server database, with embedded validation procedures. Field data is imported directly into the database in raw original format, without adjustments or calibrations, and the digital assay data is loaded directly to the database from files received from the laboratory.

In AMC's opinion, sample preparation and assaying procedures have been applied that are well suited to the nature of the mineralisation. Both primary and umpire assaying are conducted using recognized commercial laboratories. Samples and assay results are managed for both security and high confidence, and a range of industry-standard QA/QC procedures have been implemented to ensure high levels of accuracy and precision.

AMC notes that in 2010, Atlas Tin arranged for an independent review of field and sampling procedures and responded positively by implementing recommendations from the review report. These include the incorporation of certified reference material.

AMC considers the confidence in the sample data in general to be high and of suitable quality for use in the grade estimation.

2.4.4 Data validation

AMC has reviewed the database for:

- Duplicate data.
- Missing intervals.
- Inconsistent from (m) and to (m) values.
- Assays exceeding sensible values.
- Collar locations within the project area.
- Excessive drillhole deviation.
- Adherence to defined logging codes.

The database validation process identified a few minor errors in the data, none of which would impact the grade estimation. Overall the data is of reasonable quality to support a Mineral Resource estimation.

2.5 Geological interpretation

Key criteria used to develop the geological interpretations of the mineralisation include:

- That the tourmaline-altered breccias are the dominant hosts to tin mineralisation.
- That the breccias can be identified from geological logs and potassium depletion.
- That two basic structural orientations of the breccias have been defined, being:
 - A series of east-west trending vertical feeders from 2 m to 5 m thick.
 - A series of moderately north-dipping mineralised stacked lodes that extend up and down dip of the vertical feeders within the sedimentary package.
- That the geometry of the tin mineralisation is largely coincident with, but not exactly the same as, the tourmaline-altered breccias.

The following criteria have been used to define the presence or absence of tin mineralisation, and in generating interpretations which exhibit geological and grade continuity:

- < 0.5 % Sn quartz cassiterite stringers preferentially developed in tourmaline.
- 0.5 % Sn to 2% Sn as above, plus disseminated cassiterite in tourmaline.
- >2 % Sn as above, plus wider quartz cassiterite veins and breccias.

The guiding principle used to generate the geological interpretation and the domains used for estimation is that where tourmaline alteration is present there is elevated potassium, and where tin mineralisation occurs within the tourmaline alteration there is a depletion of potassium.

Tin mineralisation is not confined only to areas of tourmaline alteration, but outside the tourmaline altered zone tin grades show significantly less grade continuity. The Mineral Resource Estimate is confined to areas of tourmaline alteration.

In AMC's opinion much of the local interpretation of mineralised zones remains subjective and some intersections of tin grade at times exhibit very short correlation distances. Although two adjacent intersections may be confidently linked within the global framework, the tenor of grades and/or thicknesses of the same adjacent intersections can be very different. Consequently, at local scales between individual intersections, correlations can be ambiguous, and variability in zone grades and thicknesses can be high.

In addition, there is no association between tin mineralisation and quartz, sulphide, arsenic, copper or any other easily visible minerals. Nor does there appear to be any structural features allowing the easy visual identification of the mineralised host rock. This is valid for tin in both tourmaline altered, and non-tourmaline altered host rock.

Differences in two domain interpretations carried out in March 2013 and in September 2013 are shown in Figure 2.1. This figure shows the same cross-section for both interpretations. Note on this section there was no additional drilling between March and September. There is a change in geological approach to the interpretation with the assumption of sub-vertical feeder zones, on the west in this section and the exclusion of tourmaline alteration zones which are not mineralised, shown in the area in the blue oval.

In Figure 2.1 tourmaline alteration is represented by potassium values shown as potassium (K%) on the left-hand side of each drillhole. Tin mineralisation (Sn%) is shown to the right of each drillhole.

The spatial relationships between potassium depletion and tin mineralisation in drillholes is generally valid, particularly for the main central Meknès zone. However, while the relationship remains a good overall guideline, it is not sufficiently strong to provide for a definitive demarcation of mineralised intersections.

In AMC's opinion, there is a moderate to high potential for alternative interpretations of the tin mineralisation to those currently being used. This is common in hard rock cassiterite tin deposits which share similarities with high nugget gold deposits. Risk can be mitigated by ensuring mineralisation continuity and distribution is well understood either by trial mining areas or by using close spaced pre-production resource definition / grade control drilling well in advance of mining.



Figure 2.1 Differences in geological interpretation between March and September 2013

2.6 Grade estimates

2.6.1 Meknès Trend

Both data analysis and grade estimation samples were composited to 1 m, which is the most frequent sampling interval. Univariate data analysis was undertaken using dedicated geostatistical software. Back-transformed Gaussian variograms were generate for most domains. The resultant experimental variograms were modelled with a nugget effect and two spherical structures. The relative nugget effects are high, and second structure ranges are in the order of 100 m to 150 m.

Grade estimation into 20 m (E) x 20 m (N) x 5 m (RL) parent cells was undertaken by ordinary kriging for each of tin, potassium, and sulphur. Sub-cell divisions along the domain boundaries provided for accurate domain volume representations.

Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. The estimates were constrained by the interpreted tourmaline-silica breccia wireframes, with hard boundaries between mineralised and non-mineralised zones, and zonal estimation between defined domains. Search ellipse orientations were controlled by the process of dynamic anisotropy, which utilizes the local dips and dip directions of the zone boundaries within the area of the cell being estimated.

High-grade top-capping was not used during estimation of any of the variables. The decision not to cap was based on evidence of relatively few extreme-value high-grade assays, and by sensitivity testing. AMC does not believe that the absence of top-capping materially affects the quality of the estimation.

Due to the good data coverage over the deposit, bulk density was estimated into the model by ordinary kriging.

The estimation parameters were defined using quantitative kriging neighbourhood analysis (QKNA). The second pass search distances were twice the first pass distances. There was no third search pass. The model filling was refined in the Z dimension for open pitting and not across strike which is standard for an underground mining method. This is less than ideal but not a material defect. Some of the search ranges were quite large for mineralisation that exhibits such high nugget and short-range variability. However, the number of samples used in the estimation assists in negating the large search ranges used, although some smoothing of the grade is exhibited in some areas.

2.6.2 Sidi Addi Trend – Western Zone

The grade estimation for the Western Zone used an almost identical process to that used for the Meknès Trend. Differences include the parent cell size being 10 m (E) x 10 m (N) x 5 m (RL) with an average section spacing of 20 m. Three search passes were required to estimate grade into the model, with the second pass search distances being twice the first pass, and the third pass being four time the first pass. This is due to there being less drill data than that for the Meknès Trend estimation.

2.6.3 Quality of the grade estimates

In AMC's opinion, the data processes used to estimate grades into the geological models used for mineral resource estimation are thorough and reasonable and result in a robust global estimate. However, the high local variability exhibited in the sampling data suggests that on a typical stope scale, grade estimation will be poor.

2.6.4 Validation of grade estimation

Grade estimation was validated by QG by:

- Visually comparing drillholes to the estimated model grade.
- Comparing input samples, de-clustered samples, and model sample statistics.
- Generation of swath plots on 40 m spacings along and across strike and 20 m spacing in the vertical.

2.7 Resource classification

2.7.1 Method of resource classification

The following criteria have been used classify the Achmmach 2018 Mineral Resource estimate:

- Data quality and quantity, section spacing.
- Geological interpretation.
- Geological domaining.
- The spatial continuity of tin mineralisation.
- The quality of the tin estimate.
- How the resource has been classified in previous estimates.
- Drillhole spacing <20 m centres (Measured).
- Drillhole spacing between 20 m and 40 m (Indicated).
- Non-Meknès mineralisation classified as Indicated.

2.7.2 Classification criteria

The classification of a Mineral Resource estimate is a matter for the Competent Person, and opinions between resource estimation geologists can differ. In AMC's opinion the application of the classification criteria used to prepare the Mineral Resource estimate is appropriate although not always applied consistently with the implied level of confidence in the estimation. In AMC's opinion it would be more appropriate for some portions of both the Measured and Indicated material to be classified as Indicated and Inferred respectively.

A movement of material from Measured to Indicated does not affect conversion of Mineral Resources to an Ore Reserve, but better represents the confidence in the achieving the estimated grade derived during the estimation.

2.7.3 Compliance with the JORC Code

In AMC's opinion the Achmmach Mineral Resource Estimate has been prepared and reported by a Competent Person in accordance with the JORC Code.

AMC has used the block models provided to AMC by Kasbah Resources to confirm that the tonnage, grades, and classifications reported in the Achmmach Mineral Resource Estimate can be reproduced. AMC confirmed this to be the case.

2.8 Future infill drilling requirements

The Geology Section of the Achmmach 2018 DFS addresses the requirement for stope definition drilling (infill drilling). An infill drillhole spacing of 15 m is proposed. In AMC's opinion, this will be a critical requirement and should be completed sufficiently ahead of production to be meaningful.

AMC notes that because of difficulty in assessing the continuity of the boundary of economic mineralisation, 15 m spacing might still be too large to confidently define the grade boundary between the drillholes. This will be particularly difficult during the first year of mining when yet to be identified geological features, other than just tourmaline alteration, are being looked for that might provide markers grade boundaries. Although tourmaline alteration is useful guide, there is often no apparent visible difference between tourmaline altered rock that is mineralised, and tourmaline altered that is rock barren. An example of this is shown in Figure 2.2.

In addition to infill drilling AMC believes that ore drives will need to be routinely sampled as each development round is mined where safe to do so. This is likely to involve taking duplicate channel samples from the face and sidewalls, although alternative methods may be developed.

In other hard rock tin deposits that exhibit short range variability, rock from ore drive development is often sent to the processing plant before the sampling results are known. This generally increases the amount of waste processed. The inclusion of ore sorting technology in the Achmmach processing circuit will reduce the impact of this practice.



Figure 2.2 Example of Achmmach mineralised and barren tourmaline altered sediments
3 Geotechnical and hydrological studies

3.1 Hydrogeological investigations

Hydrogeological investigations have mainly focused on identifying potential wellfields to supply water for the mining and processing operation. Very little investigation work has been carried out to estimate ground water inflows into the mine workings. However, the following information has been used to establish the dewatering design for the mine, which is based on a maximum inflow for the whole mine of 14 L/s:

- During development of the Achmmach underground exploration workings water inflows were experiences which ultimately raised the water level in the shaft from 890 mRL to 945 mRL. The shaft was subsequently used as a water supply for exploration drilling. By late 2009 ground water had stopped following into the shaft and during AMC's site visit there appeared to be very little water in the shaft.
- During 2008, an easterly trending fluorite exploration decline was developed by SAMINE close to the western end of the Achmmach deposit. The decline extended below the Sidi Addi fault. SAMINE is reported to have been continuously pumping about 13 L/s from the decline. Dewatering of the decline coincided with the reduction in water level in the Achmmach exploration shaft.
- Little water has been encountered during exploration drilling.

The conclusion has been drawn that groundwater is expected to be strongly associated with large geological structures such as the Sidi Addi Fault. Also, that there may be perched aquifers which readily drain but are of relatively small volume. This view is supported by the lack of water encountered.

In AMC's opinion, the lack of investigation into the hydrogeological conditions leaves uncertainty regarding the quantity and nature of water inflows to the mine workings. In AMC's opinion, precautions will need to be taken in the form of cover drilling ahead of decline development, particularly below the level of the exploration workings above which dewatering may have already occurred.

3.2 Collection of geotechnical data

The industry-accepted approach is to collect geotechnical data directly from the drill core immediately after drilling. This has not been consistently carried out during the various exploration programmes at Achmmach, and the full range of geotechnical parameters required to characterise the rock mass were not logged.

However, significant and relevant geotechnical data has been derived indirectly from logging data and used to develop a geotechnical database that provides a reasonable basis for mine design and for estimating ground support requirements.

Geotechnical consultants engaged by Atlas Tin have attempted to estimate a complete dataset by estimating missing values using core photographs and from the structural logging that was carried out. Rock mass parameters were estimated using a simple probabilistic approach based on rock type (sandstone, siltstone, shale, mudstone), weathering, and alteration in holes a limited number of holes (AD119 to AD130) where 64% of the logged strength was logged as high to extremely high.

Because of the need to indirectly estimate much of the geotechnical data, there will be greater uncertainty regarding the performance of the rock mass during mining than would be the case had the data been collected in a comprehensive and systematic manner. Consequently, it is AMC's opinion that more conservatism needs to be built into the estimates of pillar strength, stope dilution for any given stope size, and ground support requirements than is currently presented in the 2018 DFS report.

3.3 Stress measurements

No stress measurements have been taken at the site. Estimates of the virgin stress field have been based on the expected regional stress regime and interpretations of the structural data obtained at site. Because of the relatively shallow depth of the planned workings AMC believe it unlikely that the virgin stress field will be a significant factor determining the stability or the cost of supporting the mine workings. It is noted that the Achmmach deposit is in a region of low earthquake hazard.

3.4 UCS testing

A total of 71 uniaxial compressive strength (UCS) tests have been completed. Of these, Atlas Tin considered 59 tests to be of a satisfactory standard. AMC notes that there are some inconsistencies in the reporting of the type of failures during testing; whether through intact rock or along discontinuities.

The UCS statistics, for various lithologies are reported in Table 3.1. Shale is reported as the dominant rock type. Sandstone units are up to several metres thick but are generally less than 30 cm thick. The sediments underwent substantial ductile and brittle deformation resulting in moderately to steeply dipping bedding and frequent metre-scale tight parasitic folding. The UCS statistics display a wide range of strengths from weak to very strong. They also show a bimodal distribution, which is indicative of the rock strength anisotropy.

Estimates have been made of the orientation angle of the rock fabric to estimate the rock strengths perpendicular to, and parallel to, the bedding and foliation. The estimates of UCS at different orientation angles are shown in Table 3.2.

The conclusion is drawn that UCS perpendicular to bedding/foliation averages 134 MPa and that this strength is applicable to pillar strength designs. Also, that the strength along bedding/foliation averages 75 MPa and this is applicable to estimating the stability of the stope hanging wall (HW) and footwall (FW) exposures.

In AMC's opinion, the globally adopted UCS strength for pillar design and for assessing HW and FW stability are too high for the following key reasons:

- They do not distinguish between the different rock types particularly the weaker interbedded sandstone. Or the unpredictable orientation of bedding due to the parasitic folding.
- The use of average values rather that the lower quartile values to determine rock strength design parameters, particularly with such a wide range of UCS test results, creates a risk that many pillars and stopes will perform below expectation. Because the relationship between rock mass strength and stope stability is not linear, the adverse impact on recovery and dilution of poor pillar and stope performance is not offset by the better performing stopes.

The high (in AMC's opinion) UCS values adopted for the global rock strength, impact on the assessment of the estimates of stable stope spans, estimates of pillar size, and on estimates of ground support requirements.

| Statistics | Mudstone | Sandstone | Shale | Siltstone |
|---------------------|----------|-----------|-------|-----------|
| No. of tests | 7 | 42 | 15 | 3 |
| Minimum (MPa) | 12.6 | 5 | 7 | 91 |
| 25% Quartile (MPa) | 15 | 23 | 19 | 91 |
| Weighted Mean (MPa) | 26 | 43 | 72 | 212 |
| Median (MPa) | 25 | 38 | 72 | 245 |
| 75% Quartile (MPa) | 33 | 60.5 | 91 | 274 |
| Maximum (MPa) | 45 | 161.4 | 274 | 274 |

Table 3.1 UCS statistics by lithology

Source: Kasbah Resources, July 2018, Achmmach 2108 DFS

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| Orientation Angle (β) | Lower Quartile (MPa) | Average (MPa) | Upper Quartile (MPa) | | | | |
|-----------------------|----------------------|---------------|----------------------|--|--|--|--|
| 20° to 40° | 50 | 75 | 100 | | | | |

| | Table 3.2 | Estimated | UCS data | for different | orientation | angles |
|--|-----------|-----------|----------|---------------|-------------|--------|
|--|-----------|-----------|----------|---------------|-------------|--------|

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Source: Kasbah Resources, July 2018, Achmmach 2018 DFS

3.5 Structural data

0° to 20°; 40° to 90°

The comparison between logged and mapped structural data suggest good correlation with a defined bedding and foliation set. Many of the joints logged from core are of the same orientation. This occurs as a concentration within a broader range of orientations that reflects the folding and site wide variation.

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The orientation of shears has a concentration of data sub-parallel to bedding as a concentration within a broader range of orientations. In AMC's opinion there is a sufficient population of data to support the structural interpretation.

3.6 Rock mass classification

Rock mass classifications has been calculated using three systems; the Rock Tunnelling Quality Index (Q), Rock Mass Rating (RMR), and Mining Rock Mass Rating (MRMR). Both RMR and MRMR use UCS in their determination. An overestimation of UCS results in higher RMR and MRMR values. Q values are a key input to the estimation of stable stope spans and development ground support requirements.

Value for Q are normally determined directly from logging the diamond drill core. The formula for estimating Q values from the drill core data does not use rock strength (UCS). Estimates of Q can also be determined by first determining RMR (which does take account of UCS) and then applying a conversion formula to estimate Q. This second approach has been used to determine the values for Q used in the 2018 DFS mine design.

This second approach has the effect of increasing the average Q values when compared with the values determined directly from the diamond drill core. Table 3.3 shows the description of rock mass quality for different ranges of Q values. The average Q values for the different parts of the deposit estimated directly from the drill core lie within the range 2.9 to 5.2. (Poor to Fair). The average Q values estimated indirectly from the RMR values lie within the range 7.4 to 10.3 (Fair to Good). Similar increases are reported for the 25th and 75th percentile values.

Table 3.3Descriptions of rock mass quality for different Q values

| Description of rock mass quality | Very poor | Poor | Fair | Good | Very Good |
|----------------------------------|-----------|------|--------|---------|-----------|
| Q values | 0.1 - 1 | 1 -4 | 4 - 10 | 10 - 40 | 40 - 100 |

Source: Kasbah Resources, July 2018, Achmmach 2018 DFS

Based on the information provided in the 2018 DFS and supporting documents, plus AMC's inspection of drill core logs and photographs, AMC concludes that the higher Q values developed using RMR overstate the quality of the rock mass, and that the Q values developed directly from the drill core likely more representative of the rock mass quality.

3.7 Estimation of stable stope dimensions

Q values are a key input to the estimation of stable stope spans. Q values are used in conjunction with estimates of the ratio of intact rock strength to induced stress, the relative orientation of dominant jointing with respect to a free stope face and the influence of gravity on the stability of the stope face being considered. Combining these parameters produces a Modified Stability Number. The Modified Stability Number can be plotted a graph that uses empirical data from case histories of the performance of open stopes at other mines to identify stope dimensions for Achmmach that are likely to be stable.

The 2018 DFS and the supporting geotechnical report appears to use the approach described above to develop the criteria for designing stable stope spans. However, the description of the process used is unclear and confusing, as is the presentation of the stope design criteria.

In AMC's opinion, the achievable stope strike lengths at the planned height of 25 m will be significantly shorter than is indicated in the geotechnical section of the 2018 DFS report because of the overestimation of UCS and the method used to estimate Q. However, AMC notes that the proposed mining methods are sufficiently flexible to enable the strike length of stopes to be shortened to accommodate the poorer rock mass conditions.

3.8 Geotechnical assessment of stope dilution

The geotechnical section of 2018 DFS report indicates that stope dilution resulting from over break on the HW and FW will be low – equivalent to less than 0.5 m linear equivalent over-break/slough (ELOS). This assessment uses the Modified Stability Number as a basis for the estimate. Because of the over estimation of the inputs to the Modified Stability Number, AMC believes that the assessment understates the dilution that would occur at the long stope strike lengths recommended in the geotechnical stope design criteria. However, this can be compensated for by mining stopes with shorter strike lengths.

3.9 Stope pillar design

The size of the pillars that are planned to be left in some areas of the mine has been determined using rock mass strength (DRMS) in the pillar strength formula. DRMS is guided by the range 20% to 50% of the UCS perpendicular to the foliation, in this case 134 MPa. The resulting DRMS range is from 27 MPa to 67 MPa. The DRMS used in the pillar design calculation for the Achmmach Project is 56 MPa, which lies at the upper end of the range. This, combined with AMC's belief that the UCS value used to establish the DMRS range is higher than is warranted from the data, leads to the conclusion that pillar strength has been over estimated.

The consequence for the mine design is that larger and/or more frequent pillars will be required to support the HW and FW in those areas where open stoping with pillars is planned. This will have the effect of reducing the amount of ore that can be recovered. Alternatively, more stopes will need to be backfilled to achieve the planned recovery but at a higher operating cost.

3.10 Cemented rockfill (CRF)

A UCS design criterion of 250 kPa has been specified for the cemented rockfill (CRF) to be used in those stopes that require its use. A cement content of 5% is recommended to achieve this strength.

Because of the large and highly variable size distribution of the rock used in CRF, and the nature of the cement/rock mixing method, it is generally not practical to determine the relationship between cement content and fill strength using test work. Thus, the estimate of the required cement content has been based on experience at a select group of six other mines using this type of backfill. Because of the inconsistent quality of CRF higher quantities of cement are used than might otherwise be required.

Other mines using similar mining methods, and established CRF techniques, generally use between 2% and 10% and in AMC's opinion an average of 6% cement is a more likely requirement.

3.11 Development ground support

Two minimum ground support designs have been specified for the Achmmach Project; one for large decline and access development (5.0 m by 5.8 m) and one for ore drives and other development with smaller cross sections (4.5 m by 4.5 m). The support patterns involve installation of rings of splitsets at 2 m intervals. Bolt spacing within each ring varies from 1.4 m to 1.5 m. Cable bolts having a minimum length of 6 m are specified to support turnouts and other excavations wider than 6 m. Apart from the first 100 m of decline, where 25 mm thick shotcrete is specified, only occasional use of surface covering (mesh or/and shotcrete) is specified but not quantified.

The ground support specifications have been based on the estimates of the rock Q and RMR. The parameters have been used in conjunction with empirically based design charts showing the required support types including rock bolt length, support density and surface covering requirements.

Because of AMC's belief that Q and RMR have been overestimated, and its experience with support patterns, AMC is of the view that the minimum support patterns will need to be revised and will result in a significant increase in support density. Thicker shotcrete applications will also be required. AMC believes surface covering of exposed rock, probably using mesh, will be required in all development excavations.

3.12 Box cut and portal

The proposed portal accesses to the mine are in steeply sloping ground, and only small boxcuts are needed to enable the portals to be collared in firm ground. Geotechnical drilling has been carried out at the site of the portals and design criteria have been developed for construction of the boxcuts. Conceptual boxcut designs have been prepared based on the geotechnical design criteria.

Ground support plans for the portals include the use of shotcrete and mesh, but no detailed designs have been prepared.

In AMC's opinion the designs and the planned support arrangements for the boxcuts and portals are reasonable at this stage, but more detailed survey, engineering, and design will be required to enable firm cost estimates to be prepared.

3.13 Raise boring

The assessment of raisebore stability and reliability uses the Q value. The probability of failure of raises mined by raise boring will be higher for the lower value Q values. Approximately 400 m of 4.5 m diameter raise boring is included in the mine design. In AMC's opinion, it is very unlikely that stable raises of this diameter will be able to be bored. Single large diameter raises may need to be replaced with several smaller diameter raises.

3.14 Western Zone crown pillar

The Western Zone deposit, which is on the Sidi Addi trend, dips almost vertically, is shallow and outcrops at surface in some places. The 2018 DFS envisages that the deposit will be mined by underground methods although earlier studies have considered mining the upper portion of the deposit by open pitting.

Geotechnical investigations for this part of the deposit have been carried out by an independent geotechnical consultant for Atlas Tin and are reported to be at a prefeasibility study level.

The investigations indicate that there is significant depth of weathering and that rock mass conditions are poorer than in the Central and Eastern zones of the Meknès trend. The FW and HW rocks have poorer competency than the ore with Q values in moderately weathered rock for the 25th percentile and 75th percentile ranging from 0.36 to 4.0 respectively. In fresh rock, Q values for the HW and FW for the same range of percentiles are reported to be 0.52 to 9.2.

The low Q values indicate that only very small open stopes would be possible in the Western Zone and that a 40 m crown pillar should be left between the underground workings and surface. Significant ground support will be required in access and ore drive development.

AMC notes that the 2018 DFS mine design does not include a crown pillar. It also assumes the stope heights will be reduced from 25 m used in the Central and Eastern zones to 20 m. In AMC's opinion it may still not be practical to mine open stopes at this height in the partially weathered parts of the Western Zone.

AMC believes that it will be necessary to consider other mining methods for the Western Zone, this may include reconsideration of small scale open pit mining, or the use of an underground sub-level caving method. Any underground mining method will require significant ground support.

4 Mining

4.1 Mining methods

Three different drill-and-blast mining methods are proposed to suit various parts of the Achmmach deposit. The proposed mining methods are commonly used in other mines and in AMC's opinion are well suited to the Achmmach deposit. A breakdown of the total ore to be mined using each method, including from development is as follows:

- Top-down long-hole open stoping with pillars approximately 53%.
- Bottom-up long-hole open stoping with uncemented rockfill (RF) approximately 9%.
- Bottom-up long-hole open stoping with CRF and some RF approximately 22%.
- Development ore approximately 15%.

The proposed methods are flexible and final decisions on which method is most suited to different areas can be made based on information gained from infill drilling and from ore drive development. The decision to use a backfill method instead of leaving pillars would have the effect of increasing ore recovery, but at increased cost. The opposite would also be the case. These trade-offs provide the opportunity to respond to variations in geotechnical conditions, operating costs, and tin prices.

Because of AMC's opinion that the rock mass quality will be poorer than is anticipated by Atlas, AMC believes it likely that more stopes will be backfilled than are currently planned.

The proposed mine layout is shown in Figure 4.1. The figure shows stope and development outlines. The stope outline shown in colours other than yellow are stopes relying on either pillar or rockfill support.



Figure 4.1 Achmmach mine design (long section looking north)

Source: Kasbah Resources, July 16, 2018, ASX Announcement

4.1.1 Stope design process

Stope designs have been prepared using an iterative design process. A software program (MSO⁴), which is widely used in the mining industry, has been used to identify the parts of the deposit to be mined. The MSO software produced approximate stope shapes that were manually reviewed and modified to ensure that the designs were practical to mine. Some stopes that were isolated from the main mining areas and deemed to be uneconomic to access were removed from stope inventory.

The MSO process used a cut-off grade of 0.55% tin to select the mineralisation to be mined. Maximum and minimum stope widths, before the addition of a dilution skin, of 3 m and 20 m respectively were used in the design process. Maximum stope heights of 25 m in the Central and Eastern zones and 20 m in the Western Zone were used. Where low-grade lenses were identified between stopes, a minimum separation pillar width of 5 m was applied. A stope wall dilution skin of 0.5 m from the combined footwall and hangingwall (0.25 m from each wall) was permitted in the MSO design process. This dilution skin was increased to 1.0 m in the final stope designs.

In AMC's opinion, the process used to design the stope outlines is reasonable and is consistent with normal practice. The cut-off grade used has been developed by attempting to maximise the net present value of the project. AMC notes that the cut-off grade is higher than the operating breakeven cut-off grade. This is consistent with AMC's experience of studies that optimise cut-off grades.

AMC notes that there is significant variation in the shape and dip of the designed stopes, as shown in Figures 4.1. The complex stope shapes will require careful planning and design and do not lend themselves to repetitive mining sequences.

Despite the geotechnical analysis indicating that long strike lengths are possible, stope strike lengths have been limited to 20 m. Because of AMC's expectation that the rock mass quality will be poorer than estimated by the geotechnical analysis, and because of practical stope mucking and backfilling considerations AMC believes that limiting the stope lengths to 20 m is reasonable.



Figure 4.2 An example of the variety of stope shapes

4.2 Stope definition drilling

Because of the complexity of the stope shapes and the expected difficulty in visually identifying ore waste contacts during mine development, a significant quantity of stope definition drilling (infill drilling) has been included in the mine development and production schedule. The programme is designed to pierce the planned mining areas at 15 m spacings. This infill drilling will be a critical part of the process of identifying the final design stope shapes and optimally positioning ore drives to extract the stopes. There will be large negative impacts on mining recovery and dilution if this is not done well.

AMC notes that the infill drilling programme appears to extend outside the planned stoping areas. This will provide the possibility of identifying extensions to the current Ore Reserve.

In AMC's opinion, the complexity of the planning, design and mining processes at the Achmmach Project will require the employment of more geological and mine planning staff than is the case with more uniform and predictable styles of mineralisation. The requirement for these additional personnel has been recognised by Atlas Tin.

4.3 Development layout

In AMC's opinion the planned development layout is reasonable, although changes to the layout are likely to occur in some areas as infill drilling information becomes available. In AMC's opinion, minor changes to the mine design are probable but are unlikely to materially change the total quantity of development required to mine the deposit from that estimated from the current design.

4.3.1 Mine ventilation

The mine ventilation plan for the Achmmach Project is described in the 2018 DFS report. In AMC's opinion, the ventilation plan is not supported by the level of study that AMC expects in a definitive feasibility study. The following points are of concern:

- The intake and exhaust air portals are located close together in the same box cut, which creates a risk of recirculation contaminated air back into the intake airway. In AMC's opinion this will require relocation of the exhaust discharge point, which will involve some additional cost.
- The estimated total mine airflow requirements (297 m³/s) is based on the sum of the engine power ratings of the planned diesel-powered equipment fleet, and the West Australian minimum regulatory requirement of 0.05m³/s of airflow per kW of rated engine power. Because the mine workings are spread out over a large area, AMC believes that in addition to the method used, the total airflow requirements should be estimated by considering the range of different mining activities that need to be ventilated in various areas of the mine at the same time (an activity-based estimate). This may result in an increase in the total airflow requirements.

4.3.2 Backfilling

The use of RF and CRF backfill is common practice in underground mines. The fill methods are flexible and are appropriate for the Achmmach Project. Cement cost is a significant component of cost of CRF, and the mine plan attempts to minimise the quantity required. In AMC's opinion it is possible that more CRF will be required than has been estimated in the Achmmach 2018 DFS.

The Achmmach DFS Cost Model assumes the use of CRF with 4% cement content. AMC acknowledges that the favourable particle size distribution resulting from use of the ore sorter rejects will help to minimise cement usage. However, AMC believes that an average of 6% cement content is more likely.

4.3.3 Underground infrastructure

Power supply, communication, water and compressed air reticulation infrastructure is described briefly in the Achmmach 2018 DFS. The proposed systems are similar to those used at other mining operations of a similar scale, depth of workings, and mining method. Because the depth of workings is relatively shallow no underground workshop is planned.

It is envisaged that the mining contractor will provide certain facilities including surface workshops and associated facilities, low voltage (400 V, 3-phase) cabling and switchgear, UHF radio communications systems, compressors, pumps, secondary ventilation fans and refuge chambers. The cost of providing these facilities is included in the contract price estimate.

The high-level specifications of the main pumping system, the primary ventilation fans, and primary ventilation controls, are included in the Achmmach 2018 DFS, and are itemised in the capital cost estimate.

4.3.4 Sequencing and scheduling

The productivity assumptions and scheduling delays shown in Table 4.1 were used to develop the mine development and production schedule.

| Activity | Unit | Productivity |
|--|--------------------|--------------------------------------|
| Lateral jumbo development | m adv/jumbo/month | 130 increasing to 250 by month three |
| Max advance in a heading | m adv/heading/week | 30 |
| Production drilling | Drill m/drill/day | 220 |
| Stoping (7m ³ loader) | t/loader/day | 1,000 |
| Stoping (stope) | t/stope/day | 500 |
| Backfill loading (7m ³ loader) | t/loader/day | 800 |
| Backfill loading (stope) | t/stope/day | 800 |
| Truck haulage | tkm/truck/month | 80,000-90,000 |
| Capital vertical development | m adv/heading/day | 2 |
| Infill diamond drilling | Drill m/rig/day | 50 |
| Infill diamond drilling to development delay | days | 18 |
| Development to stoping delay | days | 14 |
| Slot rise delays | days | 7 |
| CRF cure delay (to adjacent stope) | days 14 | 14 |

Table 4.1Productivity rates and scheduling delays

In general, the assumed productivity rates appear reasonable and consistent with AMC's expectation of the rates that could be achieved by an experienced international mining contractor. However, AMC's believes that the interval between the completion of diamond drilling and the commencement of ore drive development (18 days) may be insufficient. However, AMC's believes that there will be sufficient flexibility in the schedule to enable the scheduled production tonnage of 750 ktpa to be achieved.

4.4 Mining equipment selection

The proposed mobile equipment fleet, excluding light vehicles is shown in Figure 4.2

| Equipment | Indicative model | Estimated maximum quantity |
|-------------------------|-------------------------|----------------------------|
| Development Jumbo | Atlas Copco M2D | 3 |
| Production drill | Atlas Copco Simba M7C | 2 |
| Development loader | loader (7.0m3) CAT 2900 | 2 |
| Production loader | loader (7.0m3) CAT 2900 | 5 |
| Truck | Truck Atlas Copco 5010 | 3 |
| Grader CAT 12G 1 | CAT 12G | 1 |
| Integrated tool carrier | Volvo L120 | 2 |
| Charge wagon | Normet Charmec | 2 |
| Concrete sprayer | Not specified | 1 |
| Agitator truck | Not specified | 1 |

 Table 4.2
 Proposed mobile equipment fleet Estimated Max. Qty

In AMC's opinion, the proposed equipment fleet is reasonable, However, because of AMC's expectation that significantly more ground support will be required than has been estimated, it is possible that additional ground support equipment will be required, this may be in the form of an additional development jumbo or a dedicated rock bolter.

4.5 Ore reserve estimation

The June 2018 Ore Reserve estimate is reproduced in Table 4.2. The Ore Reserve estimate is supported by the Achmmach 2018 DFS 2018 and in AMC's opinion has been prepared and reported by a Competent Person⁵ in accordance with the JORC Code.

| | | Proved | | Probable | | | Total | | |
|--------------------|-------------|-----------------|----------------------|-------------|-----------------|----------------------|-------------|-----------------|----------------------|
| | Ore (Mt) | Grade (% Sn) | Tin metal (kt) | Ore (Mt) | Grade (% Sn) | Tin metal (kt) | Ore (Mt) | Grade (% Sn) | Tin metal (kt) |
| Meknès Trend | 1.1 | 0.99 | 11.0 | 5.6 | 0.78 | 44.0 | 6.7 | 0.82 | 55.0 |
| Sidi Addi Trend | - | - | - | 0.3 | 0.86 | 3.0 | 0.3 | 0.86 | 3.0 |
| TOTAL | 1.1 | 0.99 | 11.0 | 5.9 | 0.79 | 47.0 | 7.0 | 0.82 | 58.0 |

Table 4.3Achmmach Ore Reserve estimate – June 2018

Values have been rounded to the nearest kt of ore, 0.01% Sn grade and kt of contained tin metal.

The geological block models used to estimate the Meknès Trend Mineral Resource (September 2013) and in Sidi Addi trend – Western Zone – Mineral Resource (November 2014) have been used to estimate the Ore Reserve for the Achmmach Project. The Ore Reserve lies wholly within the reported Mineral Resource estimates.

An incremental cut-off grade of 0.25% Sn has been applied to mineral resources that are required to be mined to access ore above the stope cut-off grade (0.55% Sn). Material above the incremental cut-off grade was deemed to have sufficient value to cover the costs of processing and selling the resulting concentrate at a profit.

Only Measured and Indicated Resources are included in the reserve estimation process. No Inferred Mineral Resources or unclassified material has been included in the Ore Reserve.

⁵ As defined by the JORC Code. amcconsultants.com

4.5.1 Recovery

A 95% mining recovery factor has been applied to all stopes. An additional 2.5% ore loss has been applied in wide stopes. Mining recovery was also reduced based on placement of rib pillars in the long-hole stoping areas as required by geotechnical recommendations, and 12.5 m thick sill pillars between CRF mining panels. It was assumed that all ore mined during development is recovered.

4.5.2 Dilution

A dilution skin of 0.5 m was applied on each HW and FW contact, and to contacts with backfill. The grade of this dilution was determined based on the Mineral Resource grade contained within the is HW and FW skin, and at zero grade for CRF. Ore mined during development had no unplanned dilution applied.

5 Metallurgical test work

5.1 Introduction

The Achmmach processing plant is planned to process ore at a nominal feed rate of 750,000 tpa at an average life-of-mine head grade of 0.82% tin, to produce concentrate at a grade of 60.2% tin.

The proposed flowsheet is typical of tin processing plant with a crush/grind/gravity separation/flotation and magnetic separation units. Several relatively new technologies are included in the flowsheet including an ore sorting unit, a high pressure grinding rolls unit (HPGR), and a high-energy attritioning stage ahead of cassiterite flotation.

A high-level processing plant mass balance is shown in Table 5.1. The overall recovery of tin contained in concentrate from the ore feed is estimated at 77.2%.

| Stream | Grade (% tin) | Tin deportment (%) | Mass deportment (%) | Annual throughput (ktpa) |
|----------------------|------------------|-----------------------|------------------------|-----------------------------|
| Run-of-mine ore feed | 0.8 | 100 | 100.0 | 750 |
| Ore sorter rejects | 0.2 | 6.4 | 30.4 | 228 |
| Final tails | 0.2 | 16.4 | 68.6 | 514 |
| Final concentrate | 60.2 | 77.2 | 1.1 | 8.250 |

Table 5.1High-level Achmmach processing plant mass balance

Source: DFS document (Table 1.7 and Table 1.8)

The major gangue minerals in the Achmmach ore are; silicates such as tourmaline and quartz, sulphides such as pyrite, pyrrhotite and arsenopyrite, and magnetite.

5.2 Representativeness of metallurgical samples

Several historical test work programmes have been completed on Achmmach samples. These include:

- A DFS-level test work programme completed in 2013-2014 on a composite from the Meknès Central Zone, and a composite from a shallow area in the Eastern Zone Shallow composite.
- EDFS test work programme completed in 2015.

In 2018, a large-scale test work programme was completed on Achmmach samples as part of the Achmmach 2018 DFS. This work was completed on four ore zones to further assess their metallurgical variability:

- Eastern Zone
- Middle 1 (Central Zone)
- Western + Middle (Central Zone)
- Middle 2 (Central Zone)

Table 5.2 shows the tested zones, and the number of holes and length of core used.

Table 5.2 Summary of 2018 test work samples

| Zone | Sample number | Number of holes | Metres of core |
|----------------------------|---------------|-----------------|----------------|
| Eastern Zone | 1+2 | 33 | 380 |
| Middle (Central) 1 | 3+4 | 29 | 425 |
| Western + Middle (central) | 5+6 | 36 | 424 |
| Middle (central) | 7+8 | 22 | 376 |

Source: DFS document (Table 6.1)

AMC believes that the bulk composite samples have sufficient coverage of the deposit to be representative of the planned ore feed to the processing plant.

5.3 Expected metallurgical performance

The 2018 metallurgical test work programmes were completed by the follow laboratories:

- Steinert:
 - Ore sorting
- ALS (Perth)
 - Comminution test work
 - Heavy liquid separation test work
 - QEMSCAN
 - Paste Tails thickening and tails rheology test work
- Koppern:
 - HPGR test work
- ALS (Burnie):
 - Flotation test work
- McArthur Ore Deposit Assessments Pty Ltd (MODA):
 - Optical microscopy

Falcon concentrator test work including piloting. A gravity test work programme (including locked-cycle gravity test work) was completed prior to the 2018 test work programme.

AMC believes that, with some minor exceptions, the metallurgical response of the proposed ore feed to the various processes in the proposed flowsheet has been thoroughly investigated and tested.

5.3.1 Ore sorting test work

Ore sorting test work was completed on samples with sizing of -32 mm to +8 mm and weighing 500 kg. AMC considers these size ranges and composite masses suitable for ore sorting testing.

A summary of the tested ore sorting mass and tin deportments is shown in Table 5.3. These values are all with respect to the +8 mm size fraction, as the -8 mm size fraction was removed ahead of ore sorting test work.

| Sample | Ore Sorter Tin | Tin Deportme (of Ore So | ent (w/w %) rter Feed) | Mass Deportm (of Ore So | nent (w/w %) orter Feed) | Tin Accepts Grade (%) |
|---------|-------------------|----------------------------|---------------------------|----------------------------|-----------------------------|--------------------------|
| | Head Grade (%) | Accepts | Rejects | Accepts | Rejects | |
| EZ | 0.92 | 94.7% | 5.3% | 48.6% | 51.4% | 1.79 |
| MZ1 | 1.10 | 91.3% | 8.7% | 55.0% | 45.0% | 1.83 |
| MZ1 +WZ | 0.70 | 88.6% | 11.4% | 41.1% | 58.9% | 1.51 |
| MZ2 | 0.93 | 89.9% | 10.1% | 56.4% | 43.6% | 1.48 |

Table 5.3Ore sorting test work - tin and mass deportments

Source: DFS document (Table 6.3)

For all sample types, the deportments of tin and mass to rejects is relatively consistent – tin deportment to rejects is from 5% to 11%; whilst the mass rejection varies between 44% and 59%.

5.3.2 Comminution and HPGR test work

Several comminution test work programmes have been completed. Three HPGR tests were also completed on a master composite of the ore sorting rejects from the four variability samples.

Table 5.4 shows a summary of the historical and current test work values, as well as the design values.

Table 5.4Comminution test work values

| Parameter | Closing Size (µm) | Historical Testwork Values | 2018 Testwork Programme Values | Design Values |
|------------------------------|----------------------|-------------------------------|-----------------------------------|---------------|
| Crushing Wi (k Wh/t) | | 16-32 | | 27 |
| UCS (MPa) | | 91-274 | | 228 |
| Rod Mill Work Index (kWh/t) | 880 | 30-34 | 26-30 | 30 |
| Ball Mill Work Index (kWh/t) | 103 | 21-26 | 22-25 | 24 |
| Abrasion Index | | 0.42-0.81 | | 0.73 |

Source: DFS document (Table 6.6)

In the historical programmes, the bond ball mill work index tests were not completed on HPGR crushed material, whilst in the 2018 programme they were. The rod mill and ball mill work indices were generally lower for the 2018 programme compared to the historical values. This is most likely due to the HPGR increasing the percentage of fines in the HPGR product and subsequently reducing the load on the ball mill.

Based on the bond ball mill index test values and the abrasion index values, Achmmach ore is considered very hard and very abrasive.

5.3.3 Gravity separation test work

The gravity separation circuit will treat -150 μ m material in the processing plant. The circuit will use a series of spirals and tabling processing methods to achieve high grade tin concentrate.

Many gravity circuit test work programmes have been completed throughput the evaluation of the Achmmach deposit. AMC have not had access to the individual test work reports, but the DFS highlighted that gravity separation concentrates that had been upgraded via tin dressing could produce tin grades of approximately 56%.

5.3.4 Jar test work

Jar grinding tests were completed with the purpose of designing and sizing the regrind mill. Table 5.5 shows the jar mill specific energies for a P_{80} product (80% passing) of 45 µm.

| Sample | F80 (μm) | Ρ ₈₀ (μm) | Jar Mill Specification Energy (kWh/t) |
|------------------|----------|----------------------|--|
| Eastern | 628 | 45 | 14.0 |
| Middle 1 | 618 | 45 | 14.5 |
| Western + Middle | 615 | 45 | 12.2 |
| Middle 2 | 562 | 45 | 13.9 |

Table 5.5 Jar Mill test work results

Source: DFS document (Table 6.7)

The variability in jar test specific energies amongst the samples is quite low. This supports the assertion that the ore is relatively homogeneous.

5.3.5 Flotation test work

In the 2018 DFS, sulphide flotation testing and cassiterite flotation test work was conducted on a 60 kg master composite of gravity upgraded material from all four sample types. This test work was completed on material with sizings of -38 μ m to +8 μ m, as the -8 μ m had been de-slimed.

AMC did not have access to any of the flotation test work reports, but the DFS has referenced key findings from historical test work programmes:

- In the 2013 DFS:
 - Successful cassiterite flotation was accomplished utilising a combination of SPA (phosphonic acid) and succinamate collectors. These collectors are common in tin processing.
 - The flotation concentrates could not be upgraded further using cleaner flotation techniques. However, multistage ultrafine Falcon concentrator test work demonstrated that relative high-grade tin concentrates could be produced.
 - Sulphur and arsenic grades in cassiterite flotation concentrate were elevated (0.78% and 0.23% respectively), as the cassiterite flotation process which does not selectively depress remnant sulphides.
- In the 2018 DFS:
 - Tests with high energy attritioning of flotation feed achieved good flotation test results.
 - Alternative collectors were trialled, but these did not have the same success as the SPA and succinamate blend.

5.3.6 Falcon concentrator test work

Falcon concentrator test work was completed on cassiterite flotation concentrates with a goal of using high-intensity gravity to separate cassiterite from gangue to improve tin grade.

Historical test work demonstrated that cassiterite flotation concentrates with tin grades of 10% to 14% could be upgraded in Falcon concentrators to grades of 40% to 42%.

5.3.7 LIMS test work

Low-intensity magnetic separation (LIMS) is included in the flowsheet for removing tramp iron as well as pyrrhotite (this includes ultra-fine LIMS and tin dressing LIMS equipment). The ultra-fine LIMS concentrate reports to the final tailings.

LIMS test work was not completed on Achmmach samples. The reasoning in the DFS was that the objective of LIMS is simply to remove steel scrap and magnetic minerals. The DFS also stated that with appropriate machine configuration and spray washing of magnetics the tin reporting to magnetics is negligible.

The composite particles of cassiterite and pyrrhotite are negligible; however, further test work should be completed to quantify the losses to final tailings via the ultra-fine LIMS concentrate.

5.3.8 Tailings test work

Tailings thickening test work demonstrated that the tailings samples could be successfully dewatered to a thickener underflow with a pulp density of 77% solids (w/w). This value is typical of a paste thickener. A value of 70% w/w was used in the design criteria.

5.4 Scaling up laboratory test work

The scale-up from test work to the plant design includes:

- The HPGR used a process specific throughput constant (m-dot value) identified from the test work for scale-up. This is consistent with typical scaling-up from HPGR test work to design.
- The comminution test work used the BBMWI and UCS values for scaling up the ball mill and crushers respectively.
- The spirals, shaking tables and magnetic separators were sized from throughput data in the mass balance.
- Jar tests indicated uniform grindability through to finer sizes (45 μm), so regrind is sized on Bond Work data.
- Flotation was scaled using 2.5 & 1.5 times test time for rougher and cleaner respectively.

5.5 Analysis of ore variability

AMC considers the Achmmach mineralogy to be relatively homogenous across the planned mining areas. This assertion is supported by the relatively constant test work results reported across the among different mining zones.

The ore sorting test work showed that the plant feed tin grades (post ore-sorter) ranged between 1.5% to 1.8%, so the variability is not high. This allows for reasonably consistent tin grades in the plant feed, providing blending takes place during the mining process and on the run-of-mine ore stockpile.

The plant design has allowed for residence times of one hour in the regrind feed tank and four hours in the tin dressing feed surge tank. AMC believes these times provide adequate for surge capacity and will reduce the impact in variability of particle sizing and mineralogy.

5.5.1 Penalty elements

Limited information presented in the Achmmach 2018 DFS. It is possible that levels of Fe, S, and As may attract penalties. Typically, a penalty of \$2 to \$3 per dry tonne of concentrate is levied for each 0.1% Fe level above the contracted grade. However, high iron, sulphur and arsenic levels are likely to be associated with residual sulphides in the concentrate and it should be possible to reduce these levels through good process control.

5.5.2 Material -7 µm

In the plant flowsheet, the -7 μ m fraction will be de-slimed via cyclones and report to final tailings. This is mainly because this slimes fraction can hinder flotation of coarser sizes. The -7 μ m material represents a 9% loss of tin to final tailings.

Future analysis of the degree of entrainment of cassiterite with waste minerals in the -7 μ m fraction may indicate an opportunity to carry out test work to identify if the cassiterite can successfully be recovered from this size fraction, thereby improving recovery.

6 Mineral Processing

6.1 Process plant flowsheet and description

Process plant design and DFS engineering has been carried out by Lycopodium ADP Pty Ltd (Lycopodium) in South Africa assisted by several independent consultants. The design process flowsheet for treating Achemach ore is shown in Figure 6.1.





Source: Kasbah Resources, July 18, 2018, ASX Announcement

6.1.1 Crushing

It is envisaged that ore delivered to the surface will be dumped in separate stockpiles based on the source of the material and its estimated grade. The ore will be blended using a front-end loader, before being fed to a run-of-mine ore bin at the head of the crushing plant.

A two-stage conventional crushing plant (primary and secondary) is proposed producing a -32 mm crushed product. Crushed ore will be screened with the +8 mm oversize fed to an ore sorter and the -8 mm will report to the HPGR circuit.

6.1.2 Ore sorter

The ore sorter will identify and separate un-mineralised or weekly mineralised rocks (waste) from rocks containing high-grade tin. It is envisaged that up to 40% of the feed to the ore sorter will be rejected as waste. The use of ore sorting enables the remaining processing plant to be sized to handle a smaller throughput capacity than the 750 ktpa capacity that would otherwise be required.

6.1.3 Grinding

The upgraded ore from the ore sorter combined with the -8 mm screened material will be fed to a HPGR crusher. The crushed product will report to a ball mill designed to produce a product with a nominal P_{80} of 150 µm to the downstream processing plant.

6.1.4 Gravity separation

The ground material will report to a coarse spirals circuit where:

- Coarse spirals concentrate will report to a coarse tabling circuit.
- Coarse spirals middlings will report to regrind mill circuit.
- Coarse spirals tails will report to final tailings.

The coarse spirals middlings and tables middlings are reground to a P_{80} of 45 μ m in a regrind ball mill. The reground material is then processed in a regrind gravity separation circuit, similar to the coarse gravity circuit.

6.1.5 Tin dressing

Gravity concentrate reports to a tin dressing circuit to improve tin grade. The tin dressing circuit includes LIMS, sulphide flotation and a final shaking table stage.

6.1.6 Ultra-fine circuit (flotation and falcon concentrators)

Prior to flotation, the -45 μm material is de-slimed using cyclones, with the -7 μm fraction reporting to final tails.

Flotation is initially used to first remove sulphide minerals and then to concentrate tin minerals:

- In the sulphide flotation stage, sulphides such as pyrite are removed.
- The sulphide flotation tailings then report to a high-energy attritoner, via additional de-sliming cyclones, to clean the mineral surfaces before reporting to the cassiterite flotation stage.

To further improve flotation, concentrate grades, the cassiterite flotation concentrate reports to Falcon concentrators to remove fine gangue minerals by a gravity process.

6.1.7 Final tailings

Final tails are thickened in a paste thickener, and the underflow reports to a TSF.

6.1.8 Final concentrate

Both the Falcon and the tin-dressing concentrates will to report to a high-intensity magnetic separation (WHIMS) circuit to remove iron-bearing minerals, and to produce final concentrate.

Final concentrates will be filtered then bagged and dispatched from site in standard shipping containers for export to overseas customers.

6.2 Equipment selection

6.2.1 Ore sorting

Ore sorting has recently been successfully implemented at the Renison Bell tin mine in Australia and at other operations. However, there are examples of installations where insufficient attention has been paid to the sensor and materials handlings systems.

Atlas Tin will need to ensure it receives sufficient technical support from the equipment supplier, particularly during commissioning and ramp-up periods of the ore sorter. The equipment supplier should provide sufficient training and hand-over to the operations. Steinert should also develop robust algorithms that can account for variability in ROM feed.

6.2.2 HPGR

The HPGR was selected in the flowsheet because it removes the requirement for a third crusher stage and rod mill (ahead of the ball mill). The testwork demonstrated that the HPGR could successfully achieve finer feed sizing to the ball mill compared to the third crusher/rod mill circuit, which would reduce the required ball mill size.

Although relatively unique to tin plants, the HPGR has been widely and successfully used in other applications. The HPGR unit is a single unit with no standby, so effective preventive maintenance will be critical.

6.2.3 Flotation

Lycopodium has selected Imhoflot cells in their cleaner design. Imhoflot cells are pneumatic cells and have been selected because they utilise counter-current froth washing for removing entrained fine gangue, and to provide rapid flotation kinetics that will preserve the attritioned cassiterite surface for a longer period.

These cells have a similar design to Jameson cells, and have been used in kaolin, coal, base metals and molybdenum applications.

6.2.4 Falcon concentrators

Lycopodium has included Falcon centrifugal gravity concentrators to treat the cassiterite flotation concentrate. These concentrators have been used at Renison Bell tin mine and have been very successful in rejecting gangue slimes.

6.2.5 Automation

In general, Lycopodium has been very thorough in the design philosophy applied to automation and process control design. Lycopodium has stated that the feed pulp density (% solids) to the spirals circuits would be measured and controlled via manual methods. Commercially available equipment is available that can automatically measure pulp densities and add water to control the density. This equipment has been successfully tested in other processing plants. Automating this aspect of the process control may assist in achieving consistent plant performance.

6.3 Comparisons with other tin operations

AMC has compared the Achmmach process flowsheet with the Renison Bell flowsheet. These flowsheets are very similar with the following common circuits:

- Ore sorting.
- Coarse gravity separation.
- Regrind milling and regrind gravity separation.
- De-sliming for removing ultra-fine slimes.
- Sulphide flotation for removing gangue sulphide minerals.
- Cassiterite flotation.
- Falcon processing of cassiterite flotation concentrates.
- Magnetic separation.

The major differences between the flowsheets is the Achmmach has a HPGR circuit, the attritioning feed preparation and the Imhoflot cells. These have already been discussed at length in this report.

Renison Bell's typical concentrate grades have historically been in the range of low 50%s to 62% tin. These grades are in-line with the tin grades proposed for the Achmmach concentrate.

6.4 The ability to achieve planned plant throughput rates

AMC has reviewed the maximum case for the plant throughput. In this case, 35% of the ROM ore is present as -8 mm (and bypasses the ore sorting circuit) and 60% of the ore sorter feed reports to the plant as accepts. In this case the plant throughput is 70 tph, but this is still below the 78 tph throughput from the design criteria. AMC believes the plant can operate at the proposed throughput rates and has the capacity to operate at higher rates if mine throughput is increased.

Lycopodium has also allowed for design throughputs of 120% of the nominal throughputs for the crushing and ore sorting circuits.

6.5 The ability to achieve planned concentrate grades

The planned concentrate grade of 60.2% tin is based on a combination of proven metallurgical test work data and process modelling used to produce plant mass balances.

The greatest risk to achieving the planned concentrate grade is the likely to result from poor performance of the ultra-fine circuit. The DFS mass balance shows the tin grade of the ultra-fine concentrate (post-Falcon) to be 46% in contrast with the dressed gravity concentrate of 65%.

It is possible that future recovery vs concentrate trade-off studies might indicate benefits of reducing concentrate grade to increase overall recovery. Depending on the marketing constraints the opposite may also be necessary (reducing overall recovery to achieve higher concentrate.

AMC notes that some other tin operations have had final concentrate grades of approximately 55% and have been successful in marketing their concentrates.

6.6 Projected process plant performance, and ramp-up

The DFS envisages a six-month production ramp-up period for commissioning of the plant, before achieving full design capacity.

AMC has reviewed the ramp-up period of other projects and has identified that the required time to achieve 100% design capacity is often up to 12 months. Because of the complexity of the processing plant flowsheet and the need to train the operating team AMC believes a longer ramp-up period will be required, particularly to achieve the planned steady state recovery and concentrate grade parameters. AMC also considers it likely that additional resources will be required during the ramp-up period to assist in trouble-shooting and optimising the plant. This will include engaging experienced tin metallurgists and specialist from equipment suppliers.

6.7 Potential difficulties in achieving planned performance

Wash water will be used in the Imohoflot cells for removing entrained gangue from concentrates. The wash water is sourced from raw water. The wash water needs to be kept as clean as possible to avoid contaminating the concentrate. Note, this is unlikely to be a major process risk as the Falcon concentrators will be able to remove entrained gangue.

The highly abrasive Achmmach ore means that the material will be high wearing. Lycopodium has allowed for this in its design by specifying quick change units in the crushers, as well as the materials of construction and liner types for ore handling and comminution. AMC considers it likely that items such as wear plates, rock boxes and ceramic-lined chutes will need to be considered to handle the high wear and to reduce downtime.

Sulphuric acid is added to the cassiterite flotation to reduce the pH to 2.5 for optimum flotation performance. Although Lycopodium has considered this in the selection of construction materials, it is possible that corrosion may be more aggressive than is currently envisaged.

Lycopodium has included an on-stream analyser (QSA) in the circuit for metallurgical accounting. Whilst this is important for optimising the plant and ensuring that concentrates are at target specification, OSAs commonly have processing issues such as blockages and often have low availability. Given the importance of these units, AMC believes that alternative slurry analysers that do not have a risk of blockages may need to be considered.

6.8 Contingency for expanded production

Lycopodium have stated in the DFS that it has allowed for a plant design and plant layout that can facilitate expansion. AMC notes that due to the hilly terrain in which the processing plant is to be sited, there is a limited footprint for expansion.

6.9 The adequacy of stockpile levels ahead of the plant

Lycopodium's design has allowed for 24 hours residence time in the fine ore stockpile, which feeds the ore sorting circuit. AMC believes this to be sufficient time to account for major crushing circuit downtime, plant trips and planned shutdowns.

7 Project infrastructure

7.1 Tailings storage facility

The tailings storage facility (TSF) designed for the Achmmach Project has been designed by Golder Associates (UK) Ltd (Golder) and is detailed in the Design Study for the Tailings Management Facility and Water Storage Dam⁶. Golder is an industry recognised expert in the design of tailings storage facilities.

The TSF was originally designed by Golder to accommodate 8 Mt of tailing at a deposition rate of 0.8 Mtpa. Changes in the scope and scale of the Achmmach Project, including the introduction of ore sorting technology, reduced the planned deposition rate to 0.52 Mtpa. The final design capacity of the TSF was reduced accordingly.

The proposed TSF is a valley impoundment to the south-west of the processing plant. Tailings will be contained by the natural contours of the valley, and by an embankment across the valley.

The embankment will be constructed in stages, the initial starter embankment will be constructed to a height of approximately 23 m high measured from the final outer toe to the crest of the wall. This will be followed by the construction of three downstream raises to a final height of approximately 37 m. A further series of five 3 m high upstream raises will take the embankment to a final height of 52 m.

The completed facility will have a storage capacity of approximately 5.5 Mm³ and a final tailings surface area of approximately 194,000 m².

7.1.1 **Design considerations**

Golder cites the following International Commission on Large Dams (ICOLD) guideline documents in relation to the design of the TSF:

- ICOLD, Bulletin 52, 1986.
- ICOLD, "Earthquake Analysis Procedures for Embankments State of the Art, (1986).
- ICOLD, "Embankment Design Criteria", 1988.

Reference is also given to the following guideline document:

European Commission, "Reference Document on Best Available Techniques for Management of Tailings and Waste Rock in Mining Activities", 2009.

The key tailings properties that are integral to the design are detailed below.

- A tailings specific gravity of 2.75 for tailings underflow and 2.87 for tailings overflow.
- A post settlement average tailings dry density of approximately 1.5 t/m³.
- The tailings have been classified as potentially acid forming (PAF).

The key climate data used in developing the TSF design are as follows:

- Average annual rainfall of 489 mm.
- Mean annual evaporation of 1,915 mm.
- Probable maximum precipitation (PMP) (45 minutes) of 443 mm/hr.
- PMP (24 hr) of 33.4 mm/hr.

It is unclear what return event was specified for the operating base earthquake A value of 0.05 g was used for the peak ground acceleration.

⁶ Design Study for the Tailings Management Facility and Water Storage Dam, Achmmach Tin Project, Golder (UK) Ltd, September 2018. amcconsultants.com 33

For the maximum credible earthquake, a 1 in 10,000-year event was used with 0.1g used for the peak ground acceleration.

7.1.2 Foundation

A geotechnical site investigation consisting of forty-one manually excavated test pits and ten boreholes was completed. Based on this data, the typical ground conditions encountered comprise:

- A thin layer of dry sandy clay topsoil, where present.
- Moderately strong sandstone/siltstone/mudstone increasing in strength with depth.
- Moderately strong dolerite intrusions.

7.1.3 Embankment design

It is proposed to construct a starter embankment with downstream and upstream slopes of 1V:3H. The three subsequent downstream raises will be constructed with upstream slopes of 1V:2H and downstream slopes of 1V:3H. The slopes of the five 3 m high upstream raises will be the same as three downstream raises.

7.1.4 Embankment construction materials

Approximately 528,000 m³ of materials will be required to construct the for embankment. Atlas proposes to obtain construction materials, including clays, mainly from within the footprint of the TSF and possibly from waste rock from mine development. Slake durability testing indicates that the in-situ mudstones in the area are sufficiently durable to suggest they can be used as embankment construction fill. The source and properties of the construction materials for the TSF embankment are not detailed in the DSF documentation.

7.2 Tailings disposal strategy

It is proposed that thickener underflow at 70% to 72% solids by weight will be pumped around the periphery of the TSF and along the constructed wall. Open spigot discharge is proposed at points along the embankment to initially provide a protective solids barrier against the constructed wall, and later along the shore to enable control over the decant pond position by displacement. The formation of convex deposition beaches which are free draining, is proposed to provide maximum utilisation of the TSF volume, and a natural landform for revegetation. The solids deposition will also provide a competent base formation for the later upstream wall lifts.

In AMC's opinion, the tailings disposal strategy is in line with standard industry practice for a valley-style TSF.

7.3 Water management

A storm water diversion system is included in the design to separate clean from dirty water. Storm water from most of the catchment area will be captured in the Water Storage Facility (the WSF). The WSF will be equipped with an operational spillway that will tie into the storm water diversion, which will run from the north-western side of the facility, past the northern side of the TSF, the embankment lifts and the starter wall, down to a dissipater structure from where the water will flow down the valley.

The TSF has been designed with sufficient capacity to contain all design criteria storm events and rainfall sequences with no discharge. In the event of a storm event that exceeds the design capacity, an engineered emergency spillway is included in the TSF design to allow a controlled release of water via an engineered spillway to protect the integrity of the TSF embankments.

Supernatant water will be removed from the TSF via a floating barge

7.4 Seepage

A compacted clay liner, with an overall permeability of no higher than approximately 1×10^{-7} m/s is designed to limit seepage. Downstream of the TSF embankment, a small HDPE-lined seepage collection dam will be constructed to retain any seepage water from the TSF.

7.5 Stability assessment

A stability assessment in line with the appropriate guidelines and using an industry standard limit equilibrium program has been completed by Golder. In completing this assessment, appropriate assumptions and shear strength parameters were applied. The assessment was completed by modelling a normal and elevated piezometric surface for both static and pseudo-static conditions. Every scenario modelled achieved a factor of safety either equal to or exceeding the minimum target factor of safety.

7.6 Monitoring

An appropriate monitoring programme for construction and operations has been is proposed.

7.7 Closure plans

A conceptual closure plan has been included in the TSF design document. At the end of the TSF operation, the external embankments will have a slope of 4.5H:1V. The profiles are stable under both normal and seismic loading conditions, provide a stable drainage system, and allow for revegetation.

Important features of the closure plan include:

- Covering the TSF area with low permeability soil cover layer and topsoil layer and shaping this cover to shed surface water towards the spillways.
- Revegetation of the final surface.

It is proposed that final details regarding the closure plan will be developed prior to decommissioning and confirmed during operation.

7.8 Discussion

The Golder TSF design study provided to AMC was not a final report and did not include the appendices. However, considerable work has been undertaken regarding the design of the TSF, with most figures and parameters approximately in line with industry standard.

The understanding of the TSF foundations is reasonable for this level of design. However, further geotechnical site investigation work will be required prior to construction.

AMC has identified no fatal flaws regarding the TSF design but notes that further work is needed to compile a comprehensive and clear final report.

7.9 Water storage facility

The WSF will provide the bulk of the project water requirements. It will be located directly upstream of the proposed TSF where a cross-valley earthen embankment will be constructed. The embankment will be constructed in a single stage to a height of approximately 30 m. The embankment will have a crest width of 7.2 m, and 1V:2.5H slopes on the both the upstream and downstream sides. The WSF will have the capacity to store approximately 330,000 m³ of surface water runoff.

To prevent excessive seepage a compacted clay liner with a minimum thickness of 1 m and with an overall permeability of no higher than approximately 1×10^{-7} m/s, will be installed on the base, side slopes and upstream face of the embankment.

Construction of the embankment will require approximately 120,000 m³ of rock fill and approximately 60,000 m³ of clay material sourced from within the WSF and TSF basins.

To prevent overtopping, an operational spillway will be required for the life of the facility as well as post closure if the embankment is to remain in place. This spillway will tie into the proposed TSF diversion channel along the north side of the facility. It should be noted that this spillway channel will require long-term maintenance.

Atlas Tin has established a model to simulate the water balance for the Achmmach Project. The model uses available climatic data and the water requirements of the plant, to estimate the water demand and availability during normal, wet and dry years.

The model uses Monte Carlo simulation to assess variations in rainfall and evaporation, thereby calculating the probability and magnitude of deficits and surpluses likely to occur throughout the project life. The simulation indicates that, under average climatic conditions, no make-up water will be required. In periods of lower than average rainfall, Atlas envisages adding make-up water from existing bores and from mine dewatering.

In AMC's opinion the proposed method of supplying water to the project by harvesting surface runoff supplemented by existing bore water and mine dewatering is reasonable.

7.10 Road access

Access to the site from Meknès is via by a section of sealed public road (31 km) and a further unsealed section of public road (20 km). A traffic survey identified that an average of 24 round trips to site will be required daily to transport crews, supplies and services to the operation.

An environmental and social impact assessment undertaken by Kasbah Resources on behalf of Atlas Tin identified community concerns relating to road access and road safety during its public inquiry and engagement programme. The community was positive about the road access being maintained by Atlas Tin and thus providing better access to the region.

Atlas Tin plans to improve the 20 km long section of unsealed road during mine construction. The plan involves creating two small diversions to provide safe entry and exit for larger trucks, and to move a 200 m section of road away from a small village. In addition, several small sections of the road are to be upgraded and widened. Atlas Tin proposes to bituminise a small section of road close the village but doesn't propose to seal the entire unsealed section of road. It is envisaged that crushed rock from the mining operation will be used to upgrade the road and to maintain it on an ongoing basis.

Atlas Tin proposes to use traffic management rules to manage the impact of traffic on the surrounding communities and other road users.

In AMC's opinion, the proposed plan for upgrading the access road is reasonable, but that it is likely that further upgrades to the road will be required over the project life in response to the potential for actual and perceived adverse impacts of the road on other road users and the surrounding community.

7.11 Power supply

The Achmmach project requires the construction of a 60-kV line from a national grid connection point 44 km to the north of the project site. This will require formal agreement with the Office of National Power and Potable Water (ONEE). Discussions between Atlas Tin and ONEE are ongoing and formal agreement with ONEE is expected following the design of the line.

ONEE has provided Atlas Tin with the proposed corridor and capital construction cost estimates for the power line. The line will be paid for by Atlas Tin but will remain the property of ONEE. The powerline has a construction time of 12 months.

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The Achmmach camp site is currently serviced by a 20-kV line that also services a neighbouring mine. This existing line will provide limited power for construction. If additional power is required during construction prior to connection of the 60-kV line, diesel generators will be used.

In AMC's opinion, the proposed power supply arrangements for the project are reasonable. Atlas Tin recognises the importance of securing agreement with ONEE for construction of the line as soon as possible to avoid the expense of installing and operating a temporary power station during construction.

7.12 Other infrastructure facilities

Atlas Tin proposes to maintain an administrative head office in Meknès, to house the key functions of finance, commercial, human resources, external relations and legal compliance. Facilities will be established at the mine site to support production activities, including stores, IT and logistics. It is anticipated that the workforce will be bussed in daily from the local communities. It is proposed that existing accommodation camp at the project site will be expanded to 55 bed capacity to accommodate expatriate and essential site-based Moroccan employees.

In AMC's opinion the other infrastructure facilities including potable water, sewerage, communications, offices, and site accommodation are consistent with the scale and scope of the project.

8 Project implementation and operational build-up

8.1 **Project implementation**

A detailed project implementation plan has been developed by Atlas Tin as part of the Achmmach 2018 DFS. The implementation plan envisages a 20-month construction period commencing 30 April 2019. The plan envisages the establishment of a project management team (Owner's Team) to manage project implementation. It is envisaged that the Owner team will be based at site/Meknès during project construction.

The project is separated into the following major areas.

- The development of the underground mine and associated infrastructure.
- Design and construction of the processing plant and related infrastructure.
- Design and construction of the WSF and TSF.
- Establishment of offsite infrastructure, such as access road upgrade and the ONEE power line, with the work to be performed by selected contractors.
- Establishment of an operations team, to run and maintain the various aspects of the operations as they are implemented.

A mine development and production contract will be awarded to a suitably qualified contractor to develop the underground mine. The portal design will be completed by a mining consultant. Atlas Tin will manage the prequalification and tendering of the mine services contract with the assistance of a specialist mining consultant. The management of the mining contract will be handed over to a mining manager who will be a member of the Owner's Team.

The project execution plan for the processing plant and associated infrastructure has been developed by Lycopodium. It is planned that an engineering, procurement, and construction (EPC) contract will be established with an international engineering company. The EPC contract will be overseen by the Owner's Team, members of which will be present in the EPC engineer's office during the detail design phase to review and approve the design and the equipment and materials selection. These personnel will relocate to site during the construction phase.

A specialist consultant will be engaged to design and supervise the construction of the WSF and TSF. An earthworks contractor will be engaged to build the structures. This work will be managed by the Owner's Team.

Establishment of the offsite infrastructure, including the access road upgrade and the power line will managed by the Owner's Team.

The Owner's Team will retain responsibility for government liaison and permitting, all operating and related activities, community relations, asset insurances, land purchases and legal services.

In AMC's opinion the implementation plan proposed by Atlas has been well considered and documented. The plan considers the need for international expertise to supplement the local capabilities of the country and the area in which the project is located. It also considers the lead time for delivery of long lead time items.

The schedule recognises the critical nature of securing a high voltage power supply and the need to secure adequate water supplies for construction through the early construction of the WSF. AMC notes that the seasonal rainfall pattern (November to April) will impact the timing of water collection in the WSF.

AMC believes that the 20-month construction period is reasonable. The planned start date of 30 April 2019 will be dependent on the project approval processes and successful financing. AMC notes that a lead time is required prior to the start of construction to provide time for contract preparation, tendering, and contractor mobilisation. Some front-end engineering and design work is being undertaken. In AMC's opinion, a period of at least four to six months is likely to be required for these activities.

8.2 Operational build-up

Atlas Tin has developed detailed organisational charts to support a progressive workforce recruitment schedule well in advance of production start-up. The recruitment plan is detailed, and in AMC's opinion has been prepared with a good understanding of the challenges of induction, training, and commissioning a new workforce prior to start-up.

The mine development programme involves a progressive build-up in activity as more development workings become available. This will assist in reducing delays associated with workforce inexperience. However, the early engagement of the mining contractor will be important to ensure that it has sufficient time to mobilise expatriate employees and to engage and train local employees for the contract.

The Achmmach 2018 Cost Model includes the post commissioning build-up of plant performance (throughput and recovery) shown in Table 8.1. The model does not make any adjustment to the concentrate grade during the build-up period.

| Time from wet commissioning | Percentage of plant design tonnage (62.5 kt per month) achieved during the month | Percentage of plant design tin recovery (77.2%) achieved during the month |
|-----------------------------|---|--|
| Month 1 | 24.0% | 70.0% |
| Month 2 | 36.0% | 75.0% |
| Month 3 | 48.0% | 80.0% |
| Month 4 | 72.0% | 85.0% |
| Month 5 | 91.2% | 90.0% |
| Month 6 | 96.0% | 100.0% |

Table 8.1Planned build-up in plant performance

Source: Achmmach 2018 Cost Model

In AMC's opinion the build-up in plant throughput tonnage is reasonable based on the over capacity of some aspects of the circuit design. However, because of the complexity of the plant flowsheet, achieving the planned build-up in plant recovery will be more challenging. Also, AMC considers it very unlikely that 60% tin concentrate grades will be achieved in the first month or even throughout the 6-month build-up period.

Consideration will need to be given to the need for a longer period to establish the stable operating plant conditions that are a prerequisite to achieving target recoveries and concentrate grades. Investigations will also be required to identify a market for the lower grade tin concentrate likely to be produced during the immediate post commissioning period.

9 Capital and operating costs estimates

9.1 General cost inputs

9.1.1 Labour costs

Atlas Tin plans to employ approximately 160 people directly, with a further 178 people employed by contractors during the peak of production. Employees will be recruited locally where possible. Key expatriate employees are expected to be sourced from Europe and Australia.

It is envisaged that a significant number of expatriate technical and training personnel will be engaged in the early stage of the project construction to support the development of policies procedures and the training of the Moroccan workforce. These expatriate personnel will transition out as the system such that by the time the mine reaches full production the workforce will exceed 90% Moroccan.

The cost of employing managerial, technical, and operating labour has been developed with the assistance of a Moroccan mining industry consultant. The employment costs of expatriate staff have been estimated by Atlas Tin using mining industry benchmarks.

The estimation of total labour requirements has been developed in detail, with due consideration given to the need for international expertise to be engaged initially and progressively replaced as the Moroccan workface gains experience. In AMC's opinion the estimated workforce and individual employment costs provide a reasonable basis for estimating overall labour costs.

9.1.2 Power cost

The power cost used by Atlas Tin in the Achmmach DFS Cost Model (\$8.77 per MWh) is based on a cost estimate advised by ONEE. Total power costs have been estimated by estimating the power used in the various mining and processing activities. The estimate of power demand is detailed and in AMC's opinion, provides a reasonable basis for estimating power costs. AMC notes that as no power supply contract has yet been agreed with ONEE, the unit power cost may be change.

9.1.3 Diesel costs

A diesel cost of \$0.92 per litre has been used in the Achmmach DFS Cost Model.

9.2 Project capital estimate

The project capital cost estimate presented in the Achmmach 2018 DFS and in the 2018 Achmmach DFS Cost Model is summarised in Table 8.1.

| Area of expenditure | DFS estimate \$ million | |
|--|----------------------------|--|
| Mining development | 12.1 | |
| Tailings storage facility and water storage facility | 3.5 | |
| Process plant | 44.5 | |
| Infrastructure | 12.0 | |
| Engineering, Procurement and Construction (EPC) | 7.2 | |
| Construction indirect costs | 5.4 | |
| Sub-total Project Construction Capital | 84.7 | |
| First fill & spares | 1.2 | |
| Contingency | 10.5 | |
| Total Project Capital Costs | 96.4 | |

Table 9.1 Project capital cost – Achmmach 2018 DFS estimate

9.2.1 Mining development capital

The mining development cost estimate has, for the most part, been prepared by taking quantity take-offs from the mine design in the form of metres of capital development, trucking requirements, and ground support requirements, then multiplying the quantities by unit rates obtained from three international mining contractors. The estimate includes contractor mobilisation and setup costs.

The contract unit rates assume that the contractor provides the equipment, labour and materials to carry out the work. Atlas Tin provides fuel, power, and explosives to the mining contractor. Atlas Tin has estimated the cost of providing these items from usage estimates developed from first principles, and supplier's price estimates.

In AMC's opinion, the quantity take-offs from the mine layout have been prepared in detail and provide reliable quantity estimates to which unit costs can be applied.

AMC notes that there are significant differences in the individual unit rates and in the estimated total contract price provided by the three international mining contractors. Atlas Tin has used the contract rates provided by the lowest price contractor to estimate the underground contract development cost. The selection of the unit rates supplied by the lowest price contractor is based on Atlas Tin's detailed assessment of the overall capability of the three contractors and their understanding of the work that will be required under the proposed contract. The assessment process included holding discussions with the companies concerned and, in the case of the lowest priced contractor, by visiting one of its contract mining operations.

No contingency has been included in the mining development cost estimate, or in the overall project contingency shown in Table 9.1.

Costs that will be incurred by Atlas Tin in managing the mining contract and carrying out geological and mining engineering work during the underground construction period (Owner's Costs). These have been estimated by Atlas Tin using estimates of the labour, equipment and materials required. No contingency has been included in the Owner's Cost estimate, or in the overall project contingency.

It is envisaged permanent underground infrastructure including; main ventilation fans, and pumping equipment, medium voltage cables and switchgear, refuge chambers, communications systems and other permanent underground infrastructure will be provided by Atlas Tin. The cost of supplying and installing these facilities items has been estimated by Atlas Tin, in part using supplier price estimates. A contingency of 12.5% has been applied to the estimated cost of supplying and installing this underground infrastructure.

In AMC's opinion the Achmmach 2018 DFS capital cost estimate understates the likely cost of developing the underground mining operation for the following key reasons:

- The selection of the unit rates from the estimates provided by the lowest price contractor.
- The absence of contingency amounts in both the contract mining estimate and the Owner's Costs.
- AMC's belief that the intensity of ground support that will be required in the development excavations has been significantly underestimated.

In AMC's opinion the mining development capital cost will need to be re-estimated to provide a reasonable control budget for development of the underground mine. The re-estimate will need to be based on a detailed review of ground support requirements.

9.2.2 Tailings and water storage facilities

The capital cost of constructing the starter wall for the TSF to enable storage of the first four years production has been estimated by Golder Associated (UK) Ltd (Golder). The estimate is based on a revision and update of an estimate prepared during 2017 for an earlier definitive feasibility study on the Achmmach project. The earlier estimate was based on a larger starter dam that would have been required for the higher tailings production rate that was envisaged at the time.

The capital cost of constructing the water storage facility has also been updated from the earlier 2017 estimate prepared by Golder. No change has been made to the size of the containment structure.

In AMC's opinion the cost estimates for both the TSF starter wall and the WSF are reasonable. A contingency 9.4% of the direct and indirect capital cost estimates has been in included in the overall contingency amount shown in Table 9.1.

9.2.3 Process plant

The process plant capital cost estimate has been prepared by Lycopodium and is an update of an earlier DFS study and cost estimate completed in October 2007, also by Lycopodium. The update includes the changes required to the process flowsheet due to the incorporation of ore sorting technology, and any price escalation that may have occurred since completing the 2017 study.

The estimate has been developed using a combination of detailed, semi-detailed, and factorised costs. Equipment costs are based on detailed vendor proposals. Costs for items such as steel and bulk earthworks are based on materials take-off and general arrangement drawings.

Where equipment had changed fundamentally from the 2017 study, or where new items have been introduced into the flow sheets, multiple vendor quotes have been obtained and adjudicated. In the case of the ore sorter, a single quote was obtained from the equipment supplier that had carried out the test work for Atlas Tin. For the balance of the equipment, the preferred vendor chosen from the quotations received for the 2017 DFS study were asked to revalidate their quotes.

Lycopodium has assumed that major equipment will be sourced out of South Africa where possible. AMC has reviewed the suppliers and manufactures of the major equipment in the equipment list and believe them to be credible. Most suppliers have multiple offices world-wide for supply of spare parts.

Lycopodium has defined their capital cost estimate for the process plant as a Class II Level with an accuracy level of +15%/-5% but provides no reference to the basis of the classification system.

For most equipment, Lycopodium has estimated the cost of critical spare parts based on 2% of the total capital expenditure. The estimated includes an allowance for consumables required to commission the plant (first fill).

9.2.4 Infrastructure

Part of the surface infrastructure capital cost estimate has been compiled by Lycopodium, and part by Atlas Tin. The main infrastructure capital cost is the for construction of the high voltage power supply to the project. The estimate (\$7.87 million) is based on an initial cost estimate provided by ONEE.

A total of \$ 1.2 million is included in the capital estimate to upgrade the access road. The estimate is based on supplier indicative pricings.

Other costs include potable and process water supply, sewerage management, run-off and spillage control facilities, communication systems, buildings offices and the explosive storage facilities.

9.2.5 EPC and Indirect costs

The EPC costs is the anticipated cost of engaging an international engineering firm to manage the engineering, procurement and construction of the process plant and the surface infrastructure on a fixed costs basis. The estimate has been prepared for Atlas Tin by Lycopodium.

Indirect costs include construction insurance, community costs, consultant's fees and charges, vehicles, office equipment facilities and other services and facilities required for project construction. The indirect cost estimate has been built up in detail.

9.2.6 Accuracy of the capital estimate and potential for cost overruns

For the reasons set out in Section 9.2.1. AMC believes that the capital cost estimate understates the likely cost of developing the underground mine.

Cost estimates for the process plant, the proposed infrastructure, the EPC and indirect costs and the first fill costs are based on industry accepted estimating processes for DFS level studies. A contingency of 8.5% has been used for the processing plant and infrastructure using a risk probability assessment.

AMC notes that the capital cost inputs to the Achmmach 2018 DFS Cost Model prepared by Atlas Tin use a different cost structure to that used by Lycopodium. The transfer of cost information between the two estimates creates the risk of transcription errors. AMC also notes that some reductions have also been made by Atlas Tin to the civil and earthworks cost estimated by Lycopodium because of Atlas Tin's expectation that these costs will be lower than estimated.

AMC believes that the risk of transcription errors and the adjustments to the earthworks cost increase the uncertainty of the estimate but are unlikely to materially alter the +15% to -5% accuracy range indicated by Lycopodium for the process plant and surface infrastructure.

9.3 Sustaining capital estimate

The sustaining capital cost estimate included in the Achmmach DFS Cost Model is summarised in Table 9.2.

Table 9.2Sustaining cost – Achmmach 2018 DFS estimate

| Area of expenditure | DFS estimate \$ million | |
|--|----------------------------|--|
| Mining development sustaining capital | 62.1 | |
| Mining infrastructure sustaining capital | 4.6 | |
| TSF sustaining capital | 1.4 | |
| Industrial and light vehicles | 1.0 | |
| Total | 69.2 | |

Excludes demobilisation and salvage

9.3.1 Underground mine development sustaining capital

The mine development sustaining capital has been developed in the same manner as the mine development capital. AMC has the same concerns with the estimate as set out in Section 9.2.1.

The mine infrastructure sustaining capital includes on-going expenditure on permanent electrical equipment, ventilation walls, dewatering equipment, and replacement and extensions of permanent underground infrastructure. In AMC's opinion the estimate of mining infrastructure sustaining capital is reasonably based.

9.3.2 Sustaining capital for process plant and surface facilities

No sustaining capital has been included in the Achmmach Cost Model to cover the need to replace capital items that become worn or damaged beyond economic repair, or to carry out any modifications to the process plant and infrastructure facilities that may be required. AMC believe that an annual budget for sustaining capital will be required.

AMC also believes that during the first year of operation, expenditure exceeding that included in either the sustaining capital or the operating cost estimate will be required to trouble-shoot and debottleneck the plant. Even in process plants with a simple flowsheet there is usually a requirement for adjustments to the circuit, sometimes involving replacement of some equipment. Even though the EPC contractual arrangements provide some protection for this, AMC believe that additional expenditure by Atlas Tin will very likely be required.

9.3.3 TSF sustaining capital

Sustaining capital is included in the Achmmach DFS Cost Model to increase the height of the tailings embankment in several stages. The estimate has been prepared by Golder in the same manner as the for the initial TSF starter wall. AMC notes that the final upstream lifts of the TSF have not been included in the Achmmach DSF Cost Model.

9.3.4 Industrial and light vehicles

Allowance has been made for the replacement of industrial and light vehicles which AMC believes is reasonable.

9.4 Operating cost estimate

AMC has reviewed the detailed operating cost estimate included in the in the Achmmach DFS Cost Model and in the DFS report and supporting documentation. The average life-of-mine operating cost estimate summarised from the Achmmach DFS Cost Model is shown in Table 9.3.

Table 9.3Average life-of-mine unit operating cost estimate

| Category | Units | DFS Estimate (\$) |
|----------------------|-------------------------|----------------------|
| Mining cost | Per tonne mined | 30.88 |
| Processing costs | Per tonne mined /milled | 15.65 |
| Administration | Per tonne mined /milled | 5.23 |
| Total site unit cost | | 51.76 |

Excluding VAT

9.4.1 Mining operating cost

The mining operating cost has been estimated in a similar manner to the mining capital cost estimate described in Section 9.2.1 and in AMC's opinion, is underestimated for the same reasons. And that the allowance for cement content in the CRF (4%) is lower than AMC's experience of other mines using CRF.

AMC has compared the Achmmach 2018 DFS unit mining cost estimate with AMC's benchmark costs of other underground mining operations. AMC's benchmarking costs include sustaining capital for ongoing mine development. To make the comparison, AMC has considered a 1-year period after the Achmmach Project achieves steady state production and added the sustaining capital cost to the operating cost for that year. The total cost has then been divided by the total ore mined in the year. The resulting unit cost per tonne mined (\$50.88) is plotted in green on the graph in Figure 9.1.



Figure 9.1 Achmmach mining cost/t plotted on AMC benchmark costs

The wide spread of costs in AMC's benchmark data is indicative of the large variety of mining methods, ore thicknesses, depths of mining and rock mass conditions at different mines, in addition to the variation in labour costs in the various mine locations. In AMC's opinion the bulk of the mines close to the trendline are mines that are similar in their physical characteristics to the proposed Achmmach mine and differ mainly in their labour costs.

Labour costs in Australian mines generally represent between 35% and 45% of total costs. In mechanised mining operations such as Achmmach, most other mining costs (fuel, power, explosives, tyres, drilling consumables, and equipment spare parts) generally vary little between different countries. Taking the differential labour costs into account AMC believes that the Achmmach cost is lower than it is reasonable to expect.

In AMC's opinion, it is reasonable to expect that the mining operating cost for Achmmach will be at the low end of AMC's benchmark data, but in AMC's opinion it is also likely that mining operating costs will be between 10% and 15% more than is estimated in the 2018 DFS.

9.4.2 Processing plant

The process plant operating costs have been prepared in a systematic way by Atlas with significant input from Lycopodium around process operating and maintenance costs.

Reagent consumptions have been based on the planned ore treatment rates, and on test work results where appropriate. Advice from mineral processing consultants and supplier's recommendations have also been used. Power consumption has been estimated by Lycopodium.

Maintenance spares for the plant have been estimated by Lycopodium based on supplier's price estimates, or as a percentage, generally 2.0%, of the capital value of the equipment per year. In the case of the ore sorting plant 4% has been used based on the supplier's advice.

Lycopodium estimates that the costs estimated by them have an accuracy level of +/-15%. AMC believes that the method used to estimate the cost of operating the process plant is consistent with the level of accuracy reported Lycopodium.

9.4.3 General and administration

Camp and accommodation costs, office rental, bus transport, the provision of firefighting and occupational health and safety facilities, insurances, and other administrative and overhead costs have been estimated by Atlas Tin using a build-up of labour and staff requirements, quotes for service suppliers, and experience of operating in Morocco. In AMC's opinion the cost estimate is reasonable.

10 The AMC Production Case

AMC has prepared a production and cost scenario for the Achmmach Project (the AMC Production Case) for use by Sumner Hall in determining a value for the Achmmach Project. In preparing the AMC Production Case AMC has used many of the input values from the Achmmach DFS Cost Model, but where AMC believes there are reasonable grounds to do so, it has adjusted certain inputs values to ensure that the AMC Production Case provides a sound basis for valuing the project. In AMC's opinion, the AMC Production Case is based on reasonable grounds and assumptions. The AMC Production Case, including the adjustments made by AMC is summarised below:

10.1 Contract rates

AMC has reviewed the contract development rates submitted by the three international mining contractors and concludes that the lowest of the three rates used to estimate mining costs (both capital and operating costs) are lower than are likely to be achieved in practice. Although an allowance has been made for dayworks, no allowance has been made for additional development work that might be required, or for claims that might be made by the contractor for delays outside its control.

Based on these considerations AMC has inflated the rates used in the Achmmach DFS Cost Model by 8%, noting that the resulting rates are marginally lower than the mid-price contractors estimate. and significantly lower than the highest of the three contractor's prices.

10.2 Ground support

Because of AMC's assessment that rock mass conditions will be poorer that estimated, increased bolting density and mesh will be required in development, and re-support will be required in some areas. AMC has adjusted the cost of ground support based on reducing the distance between bolting rings from 2.0 m to 1.0 m, while maintaining the spacing between bolts in the rings. Cablebolt density has been increased by 40% and it has been assumed that all development will be meshed. Shotcrete thickness has been increased in those areas where shotcrete is required. The adjustments result in a doubling of the estimated ground support costs.

Further to AMC's comments in Section 3,10 in this report AMC has increased the cement content of the CRF from 4% to 6%.

10.3 Ore processing production build-up adjustments

Because of the complexity of the planned flowsheet and AMC's expectation that it will take longer to achieve stable operating conditions and tin recoveries than is currently planned. The AMC Production Case is based on the build-up in plant recovery shown in Table 10.1.

| Time from wet commissioning | Achmmach 2018 DFS Plant recovery as a percentage of design recovery (77.2%) | AMC Production Case Plant recovery as a percentage of design recovery (77.2%) |
|-----------------------------|---|---|
| Month 1 | 70% | 60% |
| Month 2 | 75% | 70% |
| Month 3 | 80% | 75% |
| Month 4 | 85% | 80% |
| Month 5 | 90% | 90% |
| Month 6 | 100% | 90% |
| Month 7 | 100% | 90% |
| Month 8 | 100% | 95% |
| Month 9 | 100% | 95% |
| Month 10 | 100% | 100% |

Table 10.1 Built up in plant recovery – AMC Production Case
AMC is also of the opinion that expenditure will be required during the immediate post commissioning period to troubleshoot and debottleneck aspects of the processing plant. The AMC Production Case assumes that additional expenditure of \$1.0 million will be required during the first year of operations to achieve stable operation for the plant.

10.4 Extension to the mine life.

The AMC Production Case assumes that a greater portion of the Mineral Resource than is currently included in the Ore Reserve will ultimately be the mined following further infill drilling and engineering studies. A significant portion of the Indicated Mineral Resource is excluded from the current Ore Reserve. Atlas has indicated this is partly because of the higher cut-off grade used to identify the Ore Reserve (0.55% Sn) compared to the Mineral Resource (0.55% Sn) and partly because of an assessment that some potential stopes would not be economic to access.

AMC believes that it is reasonable to assume that the additional infill drilling and drilling outside the existing stoping areas will identify minable material. For this reason, the AMC Production Case adds 1.5 Mt of material at a grade of 0.7% to the final years of the life-of-mine production schedule. The inclusion of this material extends the life of the project by two years and adds 15% to the quantity of tin contained in the mill feed over the mine life.

10.5 Summary of the AMC Production Case

The AMC Production Case is based on the life-of-mine production and cost model prepared by Atlas Tin as part of the Achmmach 2018 DFS (the Achmmach DFS Cost Model). The key production and cost estimates from the AMC Production Case are shown in Table 10.2. For comparison, the production and cost estimates taken from the Achmmach DFS Cost Model are summarised in Table 10.3.

| | Units | FYE Total | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 to 2034 |
|--------------------------|-------|--------------|------|------|------|------|------|------|------|------|--------------------|
| Production | | | | | | | | | | | |
| Ore mined/ processed | kt | 8,513 | - | - | 213 | 691 | 749 | 726 | 749 | 749 | 4634 |
| Grade mined | % | 0.80% | - | - | 0.85 | 0.83 | 0.89 | 0.86 | 0.88 | 0.97 | 0.73 |
| Contained Sn | kt | 68 | - | - | 1.81 | 5.75 | 6.70 | 6.24 | 6.56 | 7.24 | 33.81 |
| Recovery | % | 76% | - | - | 65 | 77 | 78 | 78 | 78 | 79 | 75 |
| Concentrate produced | kt | 86.63 | - | - | 1.96 | 7.41 | 8.74 | 8.09 | 8.55 | 9.54 | 42.34 |
| Sn in concentrate | kt | 51.98 | - | - | 1.18 | 4.45 | 5.24 | 4.85 | 5.13 | 5.72 | 25.40 |
| Project Capital | | | | | | | | | | | |
| Plant and infrastructure | \$M | 83.9 | 4.0 | 68.8 | 11.1 | - | - | - | - | - | - |
| Mine development | \$M | 15.7 | 0.0 | 5.9 | 9.8 | - | - | - | - | - | - |
| Admin and OH costs | \$M | 8.2 | 0.8 | 4.6 | 2.8 | - | - | - | - | - | - |
| Total capital incl. VAT | \$M | 107.8 | 4.8 | 79.3 | 23.6 | - | - | - | - | - | - |
| Sustaining Capital | | | | | | | | | | | |
| UG development | \$M | 85.5 | 0.0 | 0.0 | 9.6 | 11.7 | 17.7 | 10.4 | 7.1 | 7.5 | 21.5 |
| Plant and infrastructure | \$M | 4.5 | 0.0 | 0.0 | 1.0 | 1.0 | 0.9 | 0.1 | 0.1 | 0.1 | 1.2 |
| Total sustaining capex | \$M | 90.0 | 0.0 | 0.0 | 10.6 | 12.7 | 18.6 | 10.5 | 7.2 | 7.6 | 22.7 |
| Operating Costs | | | | | | | | | | | |
| Mining | \$M | 277.3 | - | - | 6.7 | 27.5 | 27.8 | 29.3 | 24.1 | 24.3 | 137.5 |
| Processing costs | \$M | 133.0 | - | - | 4.2 | 11.0 | 11.7 | 11.4 | 11.7 | 11.4 | 71.6 |
| General administration | \$M | 43.9 | - | - | 2.3 | 3.7 | 3.7 | 3.7 | 3.7 | 3.6 | 23.2 |
| Total operating costs | \$M | 454.2 | 0.0 | 0.0 | 13.2 | 42.2 | 43.2 | 44.4 | 39.5 | 39.3 | 232.3 |

Table 10.2 AMC Production Case – Summary of production and cost estimates

| Key parameters | Units | FYE Totals | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 to 2032 |
|--------------------------|-------|---------------|------|------|------|------|------|------|------|------|--------------------|
| Production | | | | | | | | | | | |
| Ore mined/ processed | kt | 7,013 | - | - | 213 | 691 | 749 | 726 | 749 | 749 | 3134 |
| Grade mined | % | 0.82% | - | - | 0.85 | 0.83 | 0.89 | 0.86 | 0.88 | 0.97 | 0.74 |
| Contained Sn | kt | 58 | - | - | 1.81 | 5.75 | 6.70 | 6.24 | 6.56 | 7.24 | 23.35 |
| Recovery | % | 77% | - | - | 70 | 78 | 78 | 78 | 78 | 79 | 76 |
| Concentrate produced | kt | 74.19 | - | - | 2.11 | 7.43 | 8.74 | 8.09 | 8.55 | 9.54 | 29.72 |
| Sn in concentrate | kt | 44.51 | - | - | 1.27 | 4.46 | 5.24 | 4.85 | 5.13 | 5.72 | 17.83 |
| Project Capital | | | | | | | | | | | |
| Plant and infrastructure | \$M | 83.9 | 4.0 | 68.8 | 11.1 | - | - | - | - | - | - |
| Mine development | \$M | 14.3 | - | 5.5 | 8.8 | - | - | - | - | - | - |
| Admin and OH costs | \$M | 8.2 | 0.8 | 4.6 | 2.7 | - | - | - | - | - | - |
| Total capital incl. VAT | \$M | 106.4 | 4.8 | 78.9 | 22.6 | - | - | - | - | - | - |
| Sustaining Capital | | | | | | | | | | | |
| UG development | \$M | 68.0 | - | - | 8.4 | 10.2 | 15.6 | 9.1 | 6.2 | 6.5 | 12.0 |
| Plant and infrastructure | \$M | 2.5 | - | - | 0.5 | 0.5 | 0.8 | 0.0 | 0.0 | 0.0 | 0.6 |
| Total sustaining capex | \$M | 70.4 | - | - | 8.9 | 10.7 | 16.4 | 9.1 | 6.2 | 6.6 | 12.6 |
| Operating Costs | | | | | | | | | | | |
| Mining | \$M | 216.6 | - | - | 6.1 | 25.0 | 25.9 | 27.5 | 22.9 | 23.2 | 85.9 |
| Processing costs | \$M | 109.8 | - | - | 4.2 | 11.0 | 11.7 | 11.4 | 11.7 | 11.4 | 48.3 |
| General administration | \$M | 36.7 | - | - | 2.3 | 3.7 | 3.7 | 3.7 | 3.7 | 3.6 | 16.0 |
| Total operating costs | \$M | 363.0 | - | - | 12.6 | 39.7 | 41.3 | 42.6 | 38.3 | 38.2 | 150.2 |

Table 10.3 Achmmach DFS Cost Model – Summary of production and cost estimates

11 Exploration values

Kasbah, through its Moroccan subsidiaries, Hamada Mining and Meseta Exploration, holds tenements for several exploration prospects in the Achmmach region (Figure 11.1). Kasbah considers these prospects have potential as standalone projects or as sources of ore for a processing plant at Achmmach. In addition, Kasbah subsidiary Atlas Tin holds the Tamlalt gold project in south-east Morocco.



Figure 11.1 Regional exploration prospects

AMC's understanding of the current exploration tenement holdings is summarised in Table 11.1

| Project | Beneficial owner | Permit type | Permit | Area (km²) | Initial | Expiry |
|----------------------------|-----------------------|----------------|---------|------------|----------|----------|
| Tamlalt Atlas Tin | | PE | 223197 | 16 | 17-11-00 | 17-11-15 |
| | Atlas Tin | PE | 223198 | 16 | 17-11-00 | 17-11-15 |
| | | PE | 223203 | 16 | 17-11-00 | 17-11-15 |
| Zaer Hama | Hamada | PR | 2137997 | 16 | 09-09-16 | 09-09-20 |
| | Minerals | PR | 2137999 | 7 | 09-09-16 | 09-09-20 |
| Ment Meseta Exploration | | PR | 3558383 | 16 | 28-02-18 | 27-02-21 |
| | Meseta Exploration | PR | 3558384 | 16 | 28-02-18 | 27-02-21 |
| | | PR | 3558385 | 16 | 28-02-18 | 27-02-21 |

Table 11.1 Regional exploration tenements

Source: "Exploration tenements review" by Kasbah Resources, dated 9 July 2018.

Note: Expired tenements of the SOFZ and Ment Sn projects have been assumed to have been relinquished and were excluded from this table.

11.1 Valuation methods

"Value is the fair market value of a mineral or petroleum asset or security. It is the amount of money (or the cash equivalent of some other consideration) for which the asset should change hands on the valuation date in an open and unrestricted market between a willing buyer and a willing seller in an 'arm's length' transaction, with each party acting knowledgeably, prudently and without compulsion" (VALMIN 2005). Values for exploration properties vary widely with time and with the nature of the deal, the purpose of the valuation, and the strategic value of the property to the hypothetical buyer.

The valuation of exploration projects, particularly those for which it is not possible to quantify Mineral Resources, is very subjective. There are, however, several generally-accepted procedures to value exploration projects and AMC has used such methods as appropriate to arrive at balanced judgments of value. These include comparable transactions and joint venture terms.

Due to the paucity of comparable transactions, AMC selected the multiples of exploration expenditure (MEE) method for valuation of the Kasbah tenements. The MEE method considers the relevant and effective past exploration expenditure to derive a base value for a tenement. This value is multiplied by a prospectivity enhancement multiplier (PEM), generally between 0.5 and 3.0. The selection of PEM value is subjective, but the following scale is commonly used as a guideline:

- 1 = Exploration to date justifies the next stage of exploration.
- 2 = Strong indications of potential for economic mineralisation have been identified and there are untested targets or anomalies.
- 3 = Potentially "ore grade" intersections have already been intersected, indicating high potential for discovery of economic mineralisation.

11.2 Bou El Jaj (BLJ) exploration prospect (PE213172, and PE193313)

The BLJ prospect lies at the southernmost end of a mineralised corridor that is approximately 2.5 km to 3 km wide and nearly 12 km long in strike, running from Achmmach to the Oued Beht river. Outcropping tin mineralisation is reported along 2,100 m of strike length within prospective tourmaline-altered sedimentary rocks. The mineralisation style is identical to that at Achmmach.

BLJ was previously explored by the Bureau de Recherches et de Participations Minieres (BRPM). BRMP carried out detailed prospect mapping, sampled 38 trenches, collected 761 rock chip samples, completed 600 m of diamond drilling (five holes), completed 320 m of underground exploration in three galleries and carried out preliminary metallurgical characterisation of the ore. Four areas of high grade outcropping tin mineralisation referred to as Gallery Hill, Grande Crete, Ain Karma and Hill 982 were defined.

Kasbah acquired the prospect in early 2012 for A\$100,000, with a one-off royalty payment of \$230,000 due on commencement of mining. The two exploration prospects are held by Hamada Minerals SARL, in which Kasbah Resources has a 100% interest.

In 2013, Kasbah completed 7,947.7 m of shallow diamond drilling to test the shallow targets along 1740 m of outcropping mineralisation on four prospects. The drill holes intersected quartz-cassiterite veins in tourmaline-altered rocks. The results of the drilling provided confirmation of widespread thin zones of tin mineralisation, but the continuity was not sufficient to estimate Mineral Resources and the grades were lower than at Achmmach.

Baseline work towards an Environmental Impact Assessment has been completed.

AMC has valued the BLJ tenements using the MEE method. Kasbah did not supply details of its expenditure on the BLJ project; however, it has indicated that diamond drilling cost was approximately A\$65 per metre. Applying this cost to the 7,947.7 m of drilling reported at BLJ and adding 15% for project management costs, indicates expenditure of A\$600,000. AMC considers that the drilling programmeme did not enhanced the prospectivity of the tenement. AMC has therefore applied a PEM range of between 0.2 and 1.0 with a preferred multiplier of 0.6. This implies a value of between \$0.12 and \$0.60 million, with a preferred value of \$0.36 million.

11.3 Zaer Granite, (PR2137997 and PR2137999)

Hamada Minerals holds two Exploration Permits over part of the Zaer Granite, approximately 95 km west-south-west of Achmmach. Thin quartz-cassiterite veins are recorded in this area. Tungsten is also reported to have been mined in this area.

No significant work has been completed on the tenements by Hamada, and AMC assigns no material value to the Zaer tenements.

11.4 Ment Granite, (PR3538383, PR3538384, and PR3538385)

Kasbah subsidiary Meseta Exploration holds three exploration permits covering part of the Ment Granite, approximately 35 km southwest of Achmmach. Outcropping tourmaline veins with low-grade tin mineralisation have been noted. Work in the 1940s identified a very low-grade placer tin deposit.

No significant work has been completed on the tenements by Meseta Exploration, and AMC assigns no material value to the Ment tenements.

11.5 Tamlalt gold exploration prospect

In May 2007, Kasbah won an international tender for the Tamalt (Jbel Malek) Gold Deposit located in the far south-east of Morocco. The project was awarded to Kasbah by the Office National des Hydrocarbures et des Mines (ONHYM, formerly the BRPM). The purchase price was approximately A\$1,395,600.

The initial tenement area was 128 $\rm km^2$ but by July 2018 this had been reduced to 48 $\rm km^2$ in three licences.

Reconnaissance exploration was carried out by ONHYM prior to the sale. This work included geological mapping, geochemical sampling, ground magnetics survey and 33 diamond drill holes, totalling 7,019 m. The work demonstrated the presence of a multiple quartz vein system developed within a chlorite-sericite-altered, folded porphyritic body. A Mineral Resource was not estimated.

Kasbah did not complete any significant work on the Tamlalt Project before 2018.

A new mining code was implemented by decree in April 2016. According to DLA Piper (*https://www.dlapiper.com/en/africa/insights/publications/2017/07/mining-in-morocco-a-legal-snapshot/*):

"Mining concessions granted under the old code remain valid and governed by the laws in force on the date they were granted, however, one year before expiry they must be replaced with a mining license issued under the new code. Holders of existing research permits were required to renew their permits within one year following the introduction of the new code, however, this period has since been extended to August 2017. Failure to comply with these requirements will lead to revocation of the mining title." Kasbah noted in late December 2017 that there was a risk of forfeiture of the Tamlalt tenements. A formal Environmental and Social Impact Assessment (ESIA) process was begun to improve the likelihood of maintaining the tenements. Kasbah also held discussions with ONHYM. Legal advice reported by Kasbah indicates that there is uncertainty over Kasbah's tenure and some risk of removal of the permits ("Exploration tenements review" by Kasbah Resources, dated 9 July 2018).

In estimating a value for the Tamlalt tenements, AMC considers the following points are relevant:

- Mineral Resources have not been defined at Tamlalt. AMC considers that the project is at the early exploration stage. Kasbah has not completed any exploration work at Tamlalt since acquiring the project.
- The gold mineralisation and location of the deposit indicate no material development synergies between Tamlalt and Achmmach. The project location is remote.
- The current tenement area is 37.5% of the area purchased in 2007. Based purely on area, this suggests a reduction in the value of the tenements from A\$1.4 million to A\$ 0.5 million.
- There is significant uncertainty about the legal status of the tenements.
- Kasbah noted that "In December 2017 management commenced an informal divestment process for Tamlalt. Seven parties showed an interest, one formal proposal was received." No further details have been supplied.

AMC concludes that in combination these factors indicate that the Tamlalt tenements are currently unlikely to attract a buyer willing to pay a material price.

12 AMC's Qualifications and Independence

12.1 AMC's qualifications

AMC is a firm of independent geological, geotechnical, mining engineering, and business analyst consultants offering expertise and professional advice to exploration, mining, and mining finance industries from our offices in Australia, Canada, Singapore, Russia and the UK. A copy of an AMC profile detailing AMC's capability and available consulting services is available from our website (www.amcconsultants.com)

AMC's activities include the preparation of independent technical specialist reports, and reviews of, mining and exploration projects related to equity and debt funding. In these assignments, AMC and its subconsultants act as an independent party.

| Name | Position | Role |
|--|---|---|
| Mike Thomas (MAusIMM(CP)) | Principal Mining Consultant – An employee of AMC. | Management and coordination of the ITS Report, including the site visit. Review the mining, Ore Reserve and economic modelling aspects of the Project and, with others, the infrastructure aspects. |
| Tracie Burrows (MAIG, RPGeo/Mining) | Principal Geologist – An employee of AMC. | Review of the geological aspects of the project, including mineral resource estimation. |
| Andrew Proudman (FAusIMM (CP)) | Principal Consultant – An employee of AMC. | Review the geotechnical and hydrogeological aspects of the Project |
| Andrew Millar (MAusIMM, MACPPS) | Principal Metallurgist- An employee of AMC. | Review of the mineralogical investigations, mineral processing test work, plant design, Project infrastructure and project implementation (in part) |
| Barnes Fallaw MAusIMM | Principal Backfill Engineer – An employee of AMC | Review the backfilling and tailings storage aspects of the Project. |
| Andrew Hall (FAusIMM, FIMMM,) | Principal Mining Engineer – An employee of AMC. | Peer review. |

The following people have contributed to this ITS Report.

12.2 Independence

AMC has considered its independence with respect to ASIC Regulatory Guide 112: Independence of experts and is, in its opinion, independent of Kasbah Resources. AMC notes that:

In the interests of full disclosure, we advise that AMC, has been appointed by Atlas Tin SAS to prepare an Independent Technical Expert's report in respect of the Achmmach Tin Project to be used by Atlas Tin SAS in support of its discussions related to project financing. This is a current assignment and has yet to be completed. In addition, AMC has completed four consulting assignments on the Achmmach Tin Project since 2014. In all these assignments, AMC has acted as an independent party. The four assignments are:

- Preparation of an Independent Technical Expert's report in 2014 on the Achmmach Tin Project for a third party.
- Engaged by Atlas Tin SAS in 2017 to carry out an independent review of the 2016 small start option for the Achmmach Tin Project.
- Preparation of cost model template for the Achmmach Tin Project for Atlas Tin SAS in January 2018. AMC did not provide or review any cost inputs to be used in the cost model.
- Carrying out an independent high-level review for Atlas Tin SAS of the geology and mining sections of a draft definitive feasibility study of the Achmmach Tin Project in June 2018.

Notwithstanding these engagements, AMC is of the view that it is independent of Kasbah Resources and has no ongoing business relationship with any party in connection with Atlas Tin SAS, the Achmmach Tin Project, or the Bou El Jaj and Tamlalt exploration prospects other than as described above. While some employees of AMC and its subconsultants may have small direct or beneficial shareholdings in Kasbah Resources, neither AMC nor the contributors to this report nor members of their immediate families have any interests in Kasbah Resources that could be reasonably construed to affect their independence. AMC has no pecuniary interest, association or employment relationship with Sumner Hall or Kasbah Resources and has no interest in the outcome of the Proposed Transaction.

Kasbah Resources will pay AMC a fee according to AMC's normal per diem rates for professional services, for the preparation of this ITS Report, plus reimbursement of out-of-pocket expenses. The fee estimated at approximately A\$80,000 is not contingent upon the outcome of the proposed transaction. AMC will receive no other benefit for the preparation of this ITS Report.

12.3 Matters relating to AMC's engagement as a Specialist

In letters relating to our engagement, Kasbah Resources agreed to comply with those obligations of the Commissioning Entity under the VALMIN Code including that to the best of its knowledge and understanding, complete, accurate and true disclosure of all relevant material information will be made.

AMC has relied on the information provided by Kasbah Resources, and has no reason to believe that the information is materially misleading or incomplete or contains any material errors. AMC has not audited the information provided by Kasbah Resources, but has reviewed the information to the extent necessary to satisfy itself that the AMC Production Case presented in this ITS Report is based on reasonable grounds and that the information AMC has used in relation to the valuation of the exploration properties, is sufficient.

Kasbah Resources has been provided with drafts of this ITS Report to enable correction of any factual errors and notation of any material omissions.

Kasbah Resources has provided AMC with indemnities in relation to damages, losses and liabilities related to or arising out of its engagement other than those arising from illegal acts, bad faith or gross negligence on its part, and has also provided indemnities in relation to damages, losses and liabilities related to AMC's reliance on any information received that is false, misleading or incomplete.

This Report has been provided to Sumner Hall for the purposes of forming its opinion in relation to the proposed transaction. AMC has given its consent for its report to be appended to Sumner Hall's IER and for it to be provided to shareholders and has not withdrawn that consent before lodgement of the ITS Report with the Australian Securities & Investments Commission. Neither this report nor any part of it may be used for any other purpose without AMC's written consent.

The signatories to this report are corporate members of the AusIMM and are bound by its Code of Ethics.

Yours faithfully

M Thomas MAusIMM (CP), GAICD Principal Mining Engineer

A Hall MAusIMM (CP), Director/Principal Consultant

13 Abbreviations

| \$ | Australian dollar | MODA | McArthur Ore Deposit Assessments Ptv Ltd |
|-----------------|---|------------------|---|
| \$ million | Australian dollars million | Moz | Million ounces |
| AMC | AMC Consultants Pty 1td | mRI | Metres reduced level/ relative level |
| As | Arsenic | MRMR | Mining Rock Mass Rating |
| AusIMM | Australasian Institute of mining and metallurgy | Mt | Million tonnes |
| BRPM | Bureau des et de Participations Minières | Mtpa | Million tonnes per annum |
| CRF | Cemented rock fill | MWh | Megawatt hours |
| DFS | Definitive Feasibility Study | μm | Millionth of a metre |
| DRMS | Determined rock mass strength | NaCN | Sodium cyanide |
| ELOS | Equivalent over-break/slough | OK | Ordinary kriging |
| EPC | Engineering, procurement and construction | ONEE | Office of National Power and Potable Water |
| Fe | Iron | oz | Ounce |
| FW | Footwall | PEM | Prospectivity enhancement multiplier |
| g | Gram | PMP | Probable maximum precipitation |
| g/t | Grams per tonne | % | Percent |
| Golder | Golder Associates (UK) Ltd | Q | Rock Tunnelling Quality Index |
| HPGR | High pressure grinding roll | QAQC | Quality Assurance and Quality Control |
| HW | Hanging wall | QG | Quantitative Geoscience Pty Ltd |
| ICP-AES | Inductively coupled plasma atomic emission spectroscopy | QSA | On-stream analyser |
| ICOLD | International Commission on Large Dams | QKNA | Quantitative kriging neighbourhood analysis |
| IER | Independent expert's report | RC | Reverse circulation drilling |
| ITS | Independent Technical Specialist | RF | Rockfill |
| ITS Report | Independent Technical Specialist's Report | RL | Reduced level or relative level |
| JORC Code | Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. | RMR | Rock mass rating |
| К | Potassium | ROM | Run-of-mine |
| km | Kilometres | S | Sulfur |
| km ² | Square kilometres | Sn | Tin |
| koz | Thousand ounces | SQL | Structured query language |
| kt | Thousand tonnes | t | Tonnes |
| ktpa | Thousand tonnes per annum | t/m ³ | Tonnes per cubic metres |
| kW | Kilowatt | tpa | Tonnes per annum |
| kV | Kilovolt | tph | Tonnes per hour |
| L/s | Litres/second | TSF | Tailings storage facility |
| LHD | Load-haul-dump | UCS | Uniaxial compressive strength |
| LIMS | Low-intensity magnetic separation | V | Volt |
| М | Million | VALMIN | Code for the Technical Assessment and |
| | | Code | Valuation of Mineral and Petroleum Assets |
| | | | and Securities for Independent Expert |
| | | | Reports. |
| m | metres | Waste | Weakly mineralised rocks |
| MEE | multiples of exploration expenditure | WSD | Water storage dam |
| ML/day | mega litres per day | WSF | Water storage facility |
| mm | millimetres | XRF | X-ray fluorescence analyser |

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Annexure D – Financial Services Guide

Financial Services Guide

Financial Services Provided to Clients

Sumner Hall holds AFS License No. 231214 that authorises the company to provide financial product advice on securities and interests in managed investment schemes.

Sumner Hall provides financial product advice when Sumner Hall is engaged to prepare an independent expert's report in relation to transactions involving mergers and acquisitions. In this case, Sumner Hall has been engaged by the Directors of Kasbah Resources to provide general financial product advice in the form of an independent expert's report to be included in the Notice of Meeting prepared by Kasbah Resources in relation to the Proposed Transaction. Sumner Hall is not acting for anyone other than the Directors of Kasbah Resources.

Sumner Hall does not accept instructions from retail clients. Sumner Hall does not receive any remuneration from retail clients for financial services. Sumner Hall does not provide any personal retail financial product advice to retail investors. Sumner Hall does not provide any market related advice to retail investors.

Responsibilities and General Advice

When providing an independent expert's report, Sumner Hall's client is the entity to which the report is provided which, in this case, is Kasbah Resources. Sumner Hall receives its remuneration from that entity. No related body corporate of Sumner Hall, or any of the directors or employees of Sumner Hall or any of those related bodies corporate or any associates receives any remuneration or other benefit attributable to the preparation and provision of this report.

This report has been prepared for the Directors of Kasbah Resources to assist in making their recommendation to shareholders in relation to the Proposed Transaction. This report should not be used for any other purpose or by any other party. To the extent that this report is used by any party other than the Directors of Kasbah Resources, this report would constitute general financial product advice only and has been prepared without taking into account the personal objectives, financial situation or other relevant criteria of shareholders. Shareholders should consider the appropriateness of the general financial product advice in this report having regard to their own circumstances before acting on the general financial product advice contained in this report. Shareholders should also consider all other parts of the Notice of Meeting before making any decisions in relation to the Proposed Transaction.

Sumner Hall is responsible for this independent expert's report including this Financial Services Guide. Sumner Hall is not responsible for the Notice of Meeting or any other aspect of the Proposed Transaction other than this independent expert's report. Comments, questions or complaints regarding the Notice of Meeting or any other aspect of the Proposed Transaction other than this independent expert's report should not be directed to Sumner Hall because Sumner Hall is not responsible for that material. Sumner Hall will not respond in any way that might involve the provision of financial product advice to any retail investor.

Fees and Other Remuneration

Sumner Hall charges fees for preparing reports such as this report. These fees are usually agreed with, and paid by, the recipient of the report. These fees are sometimes agreed on a fixed fee basis and sometimes on a time and cost basis. In this case, Kasbah Resources has agreed to pay Sumner Hall a fixed fee of \$60,000 for the preparation of this report. This fee is not contingent on the conclusions reached or the outcome of the Proposed Transaction. Sumner Hall's out-of-pocket expenses in relation to the preparation of this report will also be reimbursed. Sumner Hall and its officers, representatives, related entities and associates will not receive any other fee or benefit in connection with the provision of this report.

Sumner Hall does not pay commissions or provide any other benefits to any person for referring customers or clients to Sumner Hall in connection with this report.

Conflicts of Interest

Sumner Hall is required to be independent of Kasbah Resources in order to provide this report. The guidelines for independence when preparing an independent expert's report are set out in Regulatory Guide 112 published by ASIC.

Sumner Hall has not been involved in the formulation of the Proposed Transaction. Sumner Hall's only role has been the preparation of this independent expert's report.

Sumner Hall and its related entities have not provided any services to Kasbah Resources or Pala Investments over the

past two years (or at any previous time). Neither Sumner Hall and its related entities nor any individual involved in the preparation of this report holds a substantial interest in, or is a substantial creditor of Kasbah Resources or Pala Investments or has any other material financial interest in the Proposed Transaction.

Complaint Resolution

Complaints should be sent in writing to The Complaints Officer, Sumner Hall Associates Pty Ltd, 48 Darling Point Road, Darling Point, NSW, 2027. Written complaints will be recorded, acknowledged within five days and investigated. As soon as practical, and not more than 45 days after receipt, a response will be advised in writing.

If the complaint is not satisfactorily resolved, the matter can be referred to the Financial Ombudsman Service. Sumner Hall is a member of the Financial Ombudsman Service (Member No. 35589). This service is provided free of charge to the complainant. The Financial Ombudsman Service is an independent company that has been established to provide advice and assistance to help in resolving complaints relating to the financial services industry. Further details regarding the Financial Ombudsman Service are available at their website, <u>www.fos.org.au</u>, or by contacting them directly at Financial Ombudsman Service Limited, GPO Box 3, Melbourne, Victoria, 2001 or by telephone on 1 300 780 808.

Contact Details

Sumner Hall can be contacted as follows:

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Telephone:(02) 9328-0475Email:sumner.hall@bigpond.comWeb:www.sumnerhall.com

Appendix 3

Summary of potential termination benefits for which approval is being sought.

| Agreement / Plan | Potential benefits / treatment on cessation of employment |
|--|--|
| Employment Agreements All of the Relevant Executives are | Payment in lieu of notice The Employment Agreement typically contain or will contain the ability for the Company or the relevant Group Company that is the employer to make a payment to the Relevant Executive in lieu of some or all of the applicable termination notice period (which may be up to 6 months). |
| employed under Employment | Where payment in lieu of notice is made, the payment will be calculated by reference to the Relevant Executive's base remuneration. |
| Agreements. Further details about the Employment | Accrued Benefits Accrued but untaken base remuneration, annual leave, long service leave and other leave, and reimbursement for incurred expenses will be paid out on cessation of employment. |
| Agreements of those Relevant Executives who | Leave will be accrued and paid out in accordance with contractual obligations and the law as well as any applicable Company policy. |
| are KMP are contained in the Remuneration | Although genuine accrued benefits under a law are excluded from the termination benefits provision and no shareholder approval is required to pay such benefits, some Relevant Executives may accrue benefits under Company policy which are in excess of what is strictly required by the law. |
| Report. | Pro-rata bonus Some Relevant Executives are entitled to participate in the Company's Short Term Incentive Plan. The Board may determine to make pro-rata payment of a bonus under this Program where the Relevant Executive's employment terminates part way through a bonus year. |
| | Payment for restrictive covenants The Company may elect to impose a non-compete covenant on Relevant Executives of up to 12 months, in which case, the Company will make a payment calculated on the Relevant Executive's base remuneration in consideration for such covenant. |
| Employee Incentive Plan | Relevant Executives may be entitled to participate in the Company's EIP. |
| (<i>EIP</i>) Under the Company's | Generally, unvested options or performance rights granted under the EIP will lapse if the Relevant Executive ceases to be an employee before the vesting date of the options or performance rights. However, this does not apply if the Relevant Executive is the subject of "Special Circumstances" or if the Board exercises its discretion to waive vesting requirements. |
| Performance Rights Plan and Option Incentive Scheme, Relevant Executives may be granted performance rights or options, which vest according to a | A Special Circumstance is where the Relevant Executive suffers a total and permanent disablement, dies, is made redundant or suffers severe financial hardship. The Board (or the relevant committee of the Board) also has the discretion to determine that any other circumstance constitutes a Special Circumstance and therefore, that the unvested options or performance rights of the Relevant Executive will not lapse. |
| | Vested options or performance rights of a Relevant Executive will lapse on a determination of the Board that the options or performance rights should lapse because, in the Board's opinion, the Relevant Executive (amongst other circumstances) has been dismissed or removed from office for a reason which entitles the Company to dismiss the Relevant Executive without notice. The Board may exercise its discretion not to determine that the vested options or performance rights of a Relevant Executive who has been dismissed in these circumstances should lapse. |
| time based vesting schedule and may be subject to performance conditions. | The vested options or performance rights of a Relevant Executive will also lapse on the date determined by the Board (which in no event will be more than 12 months) after the date of termination of employment of the Relevant Executive with the Company (other than due to the occurrence of a Special Circumstance). The Board has the discretion to determine that a Relevant Executive is the subject of a Special Circumstance and therefore, their vested options or performance rights should not lapse. |
| | The vesting of options or performance rights granted to a Relevant Executive may be subject to one or more performance conditions. The Board may have discretion as to whether to waive any of those performance conditions on termination of the Relevant Executive's employment. |
| | The exercise of any of the discretions by the Board referred to above may be a termination benefit. |
| Insurance premiums and pay-outs | The Company pays insurance premiums to obtain death and disability cover for Relevant Executives. The types of insurance policies that the Company currently takes out and pays the premiums for include: travel insurance policies, which may include a death and disability benefit; and statutory workers' compensation arrangements, which include a death and disability benefit. |
| | The Company may also from time to time take out and pay the premium for death and disability policies for certain Relevant Executives. |
| | The payment of these insurance premiums by the Company to an insurer so that the insurer pays an amount upon the death or disablement of a Relevant Executive could potentially result in the premium and/or the pay-out to be considered a termination benefit. |
| | Under some of these policies, the pay-out by the insurer will be made to the Company by the insurer and that amount is then paid to the insured Relevant Executive or his or her beneficiaries by the Company. |
| Other benefits | At the discretion of the Board, the Company may pay or give other reasonable termination benefits under the Company's policies from time to time or in accordance with the Relevant Executive's Employment Agreement, such as relocation benefits and payment of reasonable professional fees (such as for legal or tax advice). In some cases, after cessation of their employment, Relevant Executives may also be permitted to keep the mobile phones, computers, tablets or other electronic devices that had been provided to them by the Company. |

Appendix 4

Matters, events and circumstances which will, or are likely to, affect the calculation of the amount or value of the benefits.

| Agreement / Plan | Matter, event or circumstance |
|---------------------------------------|---|
| Employment Agreements | The following are the matters, events and circumstances which will, or are likely to, affect the calculation of the amount or value of the potential termination benefits that may be given under the Employment Agreements for the Relevant Executives: The circumstances of the Relevant Executive's cessation of employment (for example, whether the employment is terminated immediately or with notice, or by the Company or the Relevant Executive, and for what reason). The Relevant Executive's length of service. The length of the notice period and whether the Company's operational requirements at the time require the Relevant Executive to work through all or part of their notice period. The Relevant Executive's base remuneration at the time of cessation of employment. The Relevant Executive's base remuneration at the time of cessation of employment. The duration of the non-compete covenant that the Company elects to impose. The manner in which the Board (or a committee of the Board) exercises its discretion (for example, in relation to payment of a pro-rata bonus or for non-compete covenants). To the extent that the Employment Agreement provides for any termination benefits which are awards under an EIP, the matters, events and circumstances referred to in this table below in relation to an EIP are also |
| Employee Incentive Plan (EIP) | The following are the matters, events and circumstances which will, or are likely to, affect the calculation of the amount or value of the potential termination benefits that may be given under an EIP: The circumstances of the Relevant Executive's cessation of employment (for example, whether the cessation of employment arises due to termination by the Company or the Relevant Executive, and for what reason). The Relevant Executive's entitlement under an EIP at the time of cessation of employment and the conditions of such entitlement. The number of options or performance rights held by the Relevant Executive at the time of cessation of employment, and the conditions (if any) of vesting of such options or performance rights. Any applicable performance measures and the achievement of such measures. If any performance measures are applicable, the personal performance of the Relevant Executive. The market price of the Company's shares on the ASX at the relevant time. The exercise price of the Relevant Executive's options. The manner in which the Board exercises its discretion. |
| Insurance premiums and pay-outs | The following are the matters, events and circumstances which will, or are likely to, affect the calculation of the amount or value of the potential termination benefits that may be given in respect of the insurance policies: The type of insurance policy and the coverage under that policy. The role, age, salary and any pre-existing condition of the insured Relevant Executive. The circumstances of the Relevant Executive's cessation of employment (for example, due to accidental death, workplace injury or health disability). |
| Other benefits | The following are the matters, events and circumstances which will, or are likely to, affect the calculation of the amount or value of the potential termination benefits that may be given in respect of the other benefits described in Appendix 3: The Company's policies as applicable at the relevant time. The applicable market practice. The value of the services, benefits and items that the Relevant Executive is provided or entitled to keep. The circumstances of the Relevant Executive's cessation of employment. The manner in which the Board exercises its discretion. |





LODGEMENT OF A PROXY FORM

This Proxy Form (and any Power of Attorney under which it is signed) must be received at an address given above by **2:00pm (AEDT) on Tuesday**, **18 December 2018**, being not later than 48 hours before the commencement of the Meeting. Any Proxy Form received after that time will not be valid for the scheduled Meeting.

Proxy Forms may be lodged using the reply paid envelope or:

ONLINE

www.linkmarketservices.com.au

Login to the Link website using the holding details as shown on the Proxy Form. Select 'Voting' and follow the prompts to lodge your vote. To use the online lodgement facility, securityholders will need their "Holder Identifier" (Securityholder Reference Number (SRN) or Holder Identification Number (HIN) as shown on the reverse of this Proxy Form).

HOW TO COMPLETE THIS SECURITYHOLDER PROXY FORM

YOUR NAME AND ADDRESS

This is your name and address as it appears on the Company's security register. If this information is incorrect, please make the correction on the form. Securityholders sponsored by a broker should advise their broker of any changes. Please note: you cannot change ownership of your securities using this form.

APPOINTMENT OF PROXY

If you wish to appoint the Chairman of the Meeting as your proxy, mark the box in Step 1. If you wish to appoint someone other than the Chairman of the Meeting as your proxy, please write the name of that individual or body corporate in Step 1. A proxy need not be a securityholder of the Company.

DEFAULT TO CHAIRMAN OF THE MEETING

Any directed proxies that are not voted on a poll at the Meeting will default to the Chairman of the Meeting, who is required to vote those proxies as directed. Any undirected proxies that default to the Chairman of the Meeting will be voted according to the instructions set out in this Proxy Form, including where the Resolution is connected directly or indirectly with the remuneration of KMP.

VOTES ON ITEMS OF BUSINESS – PROXY APPOINTMENT

You may direct your proxy how to vote by placing a mark in one of the boxes opposite each item of business. All your securities will be voted in accordance with such a direction unless you indicate only a portion of voting rights are to be voted on any item by inserting the percentage or number of securities you wish to vote in the appropriate box or boxes. If you do not mark any of the boxes on the items of business, your proxy may vote as he or she chooses. If you mark more than one box on an item your vote on that item will be invalid.

APPOINTMENT OF A SECOND PROXY

You are entitled to appoint up to two persons as proxies to attend the Meeting and vote on a poll. If you wish to appoint a second proxy, an additional Proxy Form may be obtained by telephoning the Company's security registry or you may copy this form and return them both together. To appoint a second proxy you must:

(a) on each of the first Proxy Form and the second Proxy Form state the percentage of your voting rights or number of securities applicable to that form. If the appointments do not specify the percentage or number of votes that each proxy may exercise, each proxy may exercise half your votes. Fractions of votes will be disregarded; and

(b) return both forms together.

SIGNING INSTRUCTIONS

You must sign this form as follows in the spaces provided:

Individual: where the holding is in one name, the holder must sign.

Joint Holding: where the holding is in more than one name, either securityholder may sign.

Power of Attorney: to sign under Power of Attorney, you must lodge the Power of Attorney with the registry. If you have not previously lodged this document for notation, please attach a certified photocopy of the Power of Attorney to this form when you return it.

Companies: where the company has a Sole Director who is also the Sole Company Secretary, this form must be signed by that person. If the company (pursuant to section 204A of the *Corporations Act 2001*) does not have a Company Secretary, a Sole Director can also sign alone. Otherwise this form must be signed by a Director jointly with either another Director or a Company Secretary. Please indicate the office held by signing in the appropriate place.

CORPORATE REPRESENTATIVES

If a representative of the corporation is to attend the Meeting the appropriate "Certificate of Appointment of Corporate Representative" must be produced prior to admission in accordance with the Notice of Meeting. A form of the certificate may be obtained from the Company's security registry or online at www.linkmarketservices.com.au.

IF YOU WOULD LIKE TO ATTEND AND VOTE AT THE ANNUAL GENERAL MEETING, PLEASE BRING THIS FORM WITH YOU. This will assist in registering your attendance.



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PROXY FORM

I/We being a member(s) of Kasbah Resources Limited and entitled to attend and vote hereby appoint:

APPOINT A PROXY

the Chairman of the Meeting *(mark box)* **OR** if you are **NOT** appointing the Chairman of the Meeting as your proxy, please write the name of the person or body corporate you are appointing as your proxy

or failing the person or body corporate named, or if no person or body corporate is named, the Chairman of the Meeting, as my/our proxy to act on my/our behalf (including to vote in accordance with the following directions or, if no directions have been given and to the extent permitted by the law, as the proxy sees fit) at the Annual General Meeting of the Company to be held at **2:00pm (AEDT) on Thursday**, **20 December 2018 at HLB Mann Judd, Level 9, 575 Bourke Street, Melbourne Victoria 3000** (the **Meeting**) and at any postponement or adjournment of the Meeting.

Important for Resolution 1: If the Chairman of the Meeting is your proxy, either by appointment or by default, and you have not indicated your voting intention below, you expressly authorise the Chairman of the Meeting to exercise the proxy in respect of Resolution 1, even though the Resolution is connected directly or indirectly with the remuneration of a member of the Company's Key Management Personnel (KMP).

The Chairman of the Meeting intends to vote undirected proxies in favour of each item of business.

VOTING DIRECTIONS

Proxies will only be valid and accepted by the Company if they are signed and received no later than 48 hours before the Meeting. Please read the voting instructions overleaf before marking any boxes with an 🗵

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Benefits

Approval of Potential Termination

Resolutions

For Against Abstain*

For Against Abstain*

2 Re-election of Mr John Gooding as a

1 Adoption of Remuneration Report

3 Election of Mr Graham Ehm as a Director of the Company

Director of the Company

- 4 Election of Mr Martyn Buttenshaw as a Director of the Company
- 5 Consolidation of Share Capital
- 6 Renewal of Proportional Takeover Bid Provision in the Constitution
- 7 Approval of 10% Placement Facility
- 8 Approval of the Convertible Loan Facility

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* If you mark the Abstain box for a particular Item, you are directing your proxy not to vote on your behalf on a show of hands or on a poll and your votes will not be counted in computing the required majority on a poll.

Securityholder 1 (Individual)

Joint Securityholder 2 (Individual)

SIGNATURE OF SECURITYHOLDERS – THIS MUST BE COMPLETED

Joint Securityholder 3 (Individual)

Sole Director and Sole Company Secretary

Director/Company Secretary (Delete one)

Director

This form should be signed by the securityholder. If a joint holding, either securityholder may sign. If signed by the securityholder's attorney, the power of attorney must have been previously noted by the registry or a certified copy attached to this form. If executed by a company, the form must be executed in accordance with the company's constitution and the *Corporations Act 2001* (Cth).

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