

**South Pacific Resources Limited
(Company or SPB)**

ABN 30 073 099 171

**Notice of General Meeting and Explanatory
Statement**

The General Meeting of the Company will be held at Level 5, 56 Pitt Street, Sydney, NSW, 2000, Australia at 11.00 am (AEDT) on 13 December 2019

Independent Expert's Report: Shareholders of the Company should carefully consider the Independent Expert's report prepared for the purpose of the Shareholder approval under section 611 item 7 of the Corporations Act (refer to Resolution 4) transactions the subject of this Resolution. The Independent Expert has determined the Acquisition is fair and reasonable to the non-associated Shareholders.

This is an important document. Please read it carefully. If Shareholders are in doubt as to how to vote in respect of any or all of the resolutions contained within this document, they are advised to seek advice from their accountant, solicitor, or other relevant professional adviser prior to voting.

If you are unable to attend the General Meeting, please complete the Proxy Form enclosed and return it in accordance with the instructions set out in the Proxy Form.

South Pacific Resources Limited

ABN 30 073 099 171

Time and Place of Meeting and How to Vote

Venue

The General Meeting of Shareholders of the Company will be held at:

Level 5, 56 Pitt Street Sydney, New South Wales, Australia 2000	Commencing 11.00 (AEDT) am on 13 December 2019
--	---

How to Vote

You may vote by attending the General Meeting in person, by proxy or authorised representative.

Voting in Person

To vote in person, attend the General Meeting on the date and at the place set out above.

Voting by Proxy

To vote by proxy, please complete the enclosed Proxy Form and return by the time and in accordance with the instructions set out on the Proxy Form.

Your proxy form is enclosed at the end of the Explanatory Statement.

Voting by Authorised 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.

Chairman voting undirected proxies

The Chairman will vote undirected proxies on, and in favour of, all of the proposed resolutions.

Voting entitlement (snapshot date)

For the purposes of determining voting and attendance entitlements at the General Meeting, will be taken to be held by the persons who are registered as holding the Shares at 11am (AEDT) on 11 December 2019. Accordingly, transactions registered after that time will be disregarded in determining entitlements to attend and vote at the Meeting.

Forward-looking Statements

Some of the statements contained in this document are about the future.

Such statements which may be identified by words such as "may", "could", "believes", "estimates", "targets", "expects", "intends" and other words expressing a similar likelihood or a possibility (whether objectively or subjectively framed) occurring.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company.

Any forward-looking statements contained within this document are subject to various risk factors (both known and unknown) that could cause actual future results, conduct, performance or achievements to differ materially from those expressed or anticipated in these statements or from historical results, conduct, performance or achievements.

The Company, the Directors and management and employees or any persons named and involved in the preparation of this document:

- do not make any representation or warranty (express or implied) as to the likelihood of fulfillment of any forward looking statement, or any events or results expressed or implied in any forward looking statement; and
- disclaim any duty to update any forward-looking statements other than with respect to information they become aware of prior to the Meeting which is material to the making of a decision regarding whether or not to vote in favour of the Resolutions set out in this document except to the extent required by law.

Members are cautioned not to place reliance on any forward looking statement. The forward-looking statements contained within this document reflect views held only as at the date of this document.

Re-quotation of Shares on ASX

Shareholders should be aware that the re-admission of the Company to the ASX is at the discretion of ASX and there can be no guarantee that the ASX will approve the re-admission on conditions that are able to be satisfied by the Company, or at all.

Should this occur the Shares will not be able to be traded on the ASX until such time as those conditions can be met, if at all. Shareholders may be prevented from trading Shares should the Company be suspended until such time as it does re-comply with the ASX Listing Rules.

Public Offer does not reach \$14,000,000

\$14,000,000 is the only subscription amount under the Public Offer and as such if the Company does not raise \$14,000,000 under its Prospectus the Acquisition will not proceed. In the event the Company does not raise \$14,000,000 any application money will be returned to applicants in accordance with the provisions of the Corporations Act.

South Pacific Resources Limited

ABN 30 073 099 171

Contents

<i>Time and Place of Meeting and How to Vote</i>	<i>2</i>
<i>Chairman's Letter</i>	<i>7</i>
<i>Notice of General Meeting.....</i>	<i>8</i>
<i>Explanatory Statement.....</i>	<i>13</i>
1. Brief History of the Company and Background to Resolutions 1 to 13.....	14
1.1. Background to the Company	14
1.2. The Takmur Acquisition.....	14
1.3. Advantages and Disadvantages of the Acquisition	16
1.4. SPB Share Capital Post Transaction	17
1.5. Independent Expert's Report.....	18
2. Profile of Takmur Pte Ltd.....	18
2.1. Company Overview.....	18
2.2. Overview of Mandiri Project held by Takmur	18
2.3. New directors and management	20
2.4. Takmur's capital structure.....	21
2.5. Mandiri Project	21
2.6. Indonesia Background.....	31
3. Profile of the Company post Acquisition	32
3.1. Overview of the Company post Acquisition.....	32
3.2. Use of Funds	33
3.3. Capital Structure and Ownership.....	33
3.4. Corporate Structure	34
3.5. Board and Management Structure.....	35
3.6. Financial Information of Company.....	36
3.7. Risk Factors	39
4. Regulatory Information.....	49
1. Resolution 1 - Disposal of main undertaking.....	49
2. Resolution 2 – Approval of Change of Activities	50
3. Resolution 3 – Consolidation of Capital	51

4.	Resolution 4 – Approval of issue of Acquisition Shares	53
5.	Resolution 5 – Approval of Public Offer	55
6.	Resolution 6 – Change of Name to Pyx Resources Limited.....	55
7.	Resolutions 7 to 9 – Election of Oliver Hasler, Bakhos Georges and Gary J. Artmont as Directors.....	56
8.	Resolution 10 – Approval to Set Directors’ Fees	56
9.	Resolution 11 – Adoption of Stock Incentive Plan	56
10.	Resolution 12 – Issue of Performance Rights and Shares to Mr. Oliver Hasler..	58
11.	Resolution 13 – Replacement of Company’s Constitution.....	60
5.	Definitions.....	61
	Schedule 1 Independent Expert’s Report	64
	Schedule 2 Significant Accounting Policies.....	245
	Schedule 3 Summary of Stock Incentive Plan	250
	Schedule 4 Summary of New Constitution	253
	Schedule 5 Indonesian Legal Opinion.....	256
	Schedule 6 Financials of Takmur Pte Ltd and Controlled Entities.....	260

South Pacific Resources Ltd

ABN 30 073 099 171

Chairman's Letter

Dear Shareholders

South Pacific Resources Limited (**Company**) has entered into a binding agreement to acquire all the issued shares in Takmur Pte Ltd (**Takmur**), a company that indirectly holds the Mandiri Project, a premium quality mineral sands project in Indonesia (**Acquisition**). A condition precedent to completion of the Acquisition is that Shareholders approve the Acquisition.

The Directors have resolved, subject to Shareholder and regulatory approval, to change the nature of the business of the Company from petroleum assets acquisition and exploration to mineral sands exploration and production. This is being achieved by disposing (**Disposal**) of all of the shares held in Indo Pacific Energy Pty Ltd (**IPEL**) (including its fully owned subsidiary Coral Sea Petroleum (PNG) Limited), Pacific Shale Gas Ltd and South Pacific Resources Limited (PNG) and by acquiring Takmur.

Upon completion of the Acquisition the Company will produce and extract Zircon (grade 65.5) from its operations. It is not the intent of the Company to pursue any exploration or exploitation of any mineral other than Zircon.

The directors of the Company (**Directors**) are of the opinion that the proposed Acquisition, the proposed Disposal and the change in nature of the business of the Company are in the best interests of the Company and its Shareholders and accordingly recommend Shareholders vote to approve the Acquisition.

The Directors unanimously recommend that you vote in favour of the Acquisition Resolutions for the following reasons:

- the potential increase in market capitalisation of the Company following completion of the Acquisition and associated Public Offer may lead to increased coverage from investment analysts, access to improved equity capital market opportunities and increased liquidity, which are not currently present;
- if the Company does not proceed with the proposed Acquisition, its cash reserves will continue to be eroded by on-going administrative and corporate costs;
- the Directors have been actively seeking opportunities to return the Company to operation and enhance Shareholder value. The Directors believe the acquisition of Takmur is such an opportunity; and
- the directors believe that the Acquisition represents an exciting opportunity for the long-term growth of the Company.

It is important that you read the information set out in the attached documents and form your own view on the merits of the Transaction and the Resolutions proposed. The Directors intend to vote in favour of all Resolutions, subject to any applicable voting exclusion statements set out in the Notice of Meeting.

Yours faithfully



Domenic Martino
Chairman

South Pacific Resources Limited

ABN 30 073 099 171

Notice of General Meeting

Notice is hereby given that the General Meeting of Shareholders of South Pacific Resources Limited will be held at Level 5, 56 Pitt Street, Sydney, New South Wales, Australia 2000 at 11.00 am (AEDT) on 13 December 2019 (**General Meeting**).

The Explanatory Statement to this Notice of Meeting provides additional information on matters to be considered at the General Meeting. The Proxy Form and Explanatory Statement form part of this Notice of Meeting.

The Directors have determined pursuant to regulation 7.11.37 of the Corporations Regulations 2001 (Cth) that the persons eligible to vote at the General Meeting are those who are registered as Shareholders at 11.00 am (AEDT) on 11 December 2019.

If Shareholders are in any doubt as to how they should vote they should seek advice from their accountant, solicitor or other professional advisor.

Important: The Transaction requires Shareholder approvals under the Listing Rules, the Constitution and Corporations Act. If the Acquisition Resolutions are not passed then the Transaction will not proceed. Each of the Acquisition Resolutions are subject to, and conditional on, each of the other Acquisition Resolutions being passed. The Acquisition Resolutions should be considered by Shareholders collectively as well as individually.

Capitalised terms and abbreviations used in this Notice of Meeting and the Explanatory Statement are defined in Section 5 of the Explanatory Statement.

Business of the Meeting

Resolution 1– Disposal of Main Undertaking

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purpose of ASX Listing Rule 11.2 and for all other purposes, shareholders approve the disposal of the Company's interest in the shares of Indo Pacific Energy Pty Ltd (including its fully owned subsidiary Coral Sea Petroleum (PNG) Limited), Pacific Shale Gas Limited and South Pacific Resources Limited (PNG), on the terms and conditions set out in the Explanatory Statement."

Voting Exclusion: The Company will disregard any votes cast in favour of this Resolution by or on behalf of:

- a person who might obtain a benefit, except a benefit solely in the capacity of a holder or ordinary securities, if the Resolution is passed; or
- an associate of that person (or those persons).

However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the direction on the Proxy Form, or it is cast by the person chairing the General Meeting as a 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 2 – Approval of Change to Nature and Scale of Activities

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing all of the Acquisition Resolutions, for the purposes of ASX Listing Rule 11.1.2 and for all other purposes, approval is given for the Company to make a significant change to the nature and scale of its activities resulting from the acquisition of the businesses of Takmur as described in the Explanatory Statement."

Short Explanation: the Company has entered into agreements with Takmur pursuant to which the Company has agreed to acquire all the issued capital of Takmur (**Acquisition**). The Acquisition, if successful, will result in the

Company changing the nature and scale of its activities. ASX Listing Rule 11.1.2 requires the Company to seek Shareholder approval where it proposes to make a significant change to the nature and scale of its activities. Please refer to the Explanatory Statement for details.

If this Resolution 2 is not passed and the Acquisition is not completed, the Company will continue to use its current funds to advance its current business activities.

Voting Exclusion: The Company will disregard any votes cast in favour of the Resolution by or on behalf of:

- a person who might obtain a benefit, except a benefit solely in the capacity of a holder or ordinary securities, if the Resolution is passed; or
- an associate of that person (or those persons).

However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the direction on the Proxy Form, or it is cast by the person chairing the General Meeting as a 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 3 – Consolidation of Capital

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purposes of clause 9.1 of the Company's Constitution, section 254H of the Corporations Act, ASX Listing Rule 7.20 and for all other purposes, the issued capital of the Company be consolidated on the basis that:

- *every twenty (20) Shares be consolidated into one (1) Share; and*
- *where this consolidation results in a fraction of a Share being held by a Shareholder, the Directors be authorised to round that fraction down to the nearest whole Share,*

and otherwise on the terms and conditions set out in the Explanatory Statement."

Resolution 4 – Approval of Issue of Acquisition Shares

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purposes of section 611 (item 7), of the Corporations Act and for all other purposes, the Company approves the issue of the Acquisition Shares to the Vendors and as a result an increase in the Voting Power of the Vendors to a maximum of 79.8%, as consideration for the acquisition of the entire issued capital of Takmur Pte Ltd, on the terms and conditions set out in the Explanatory Statement."

Voting Exclusion: The Company will disregard any votes cast in favour of this resolution by or on behalf of:

- Takmur, the Vendors, and any person who will obtain a material benefit as a result of the acquisition of Takmur or the proposed issue of the Acquisition Shares (except a benefit solely by reason of being a holder of ordinary securities in the Company); or
- an associate of that person (or those persons).

However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the direction on the Proxy Form, or it is cast by the person chairing the General Meeting as a proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

Expert's Report: Shareholders should consider carefully the Independent Expert's Report prepared by Stantons and attached at Schedule 1 to this Notice for the purposes of member approvals required under section 611 (item 7) of the Corporations Act. The Independent Expert's Report opines on the fairness and reasonableness of the Takmur Acquisition.

The Independent Expert has determined that the Acquisition is fair and reasonable to the non-associated Shareholders.

Resolution 5 – Approval of Public Offer

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purposes of ASX Listing Rule 7.1 and for all other purposes, approval is given for the Company to allot and issue up to 35,000,000 Shares (on a post-Consolidation basis) at an issue price of AU\$0.40 per Share to raise AU\$14,000,000, and otherwise on the terms and conditions set out in the Explanatory Statement"

Voting Exclusion: The Company will disregard any votes cast in favour of the Resolution by or on behalf of:

- a person who is expected to participate in, or who will obtain a material benefit as a result of, the proposed issue (except a benefit solely by reason of being a holder of ordinary securities in the company); or
- any associates of those persons.

However, the Company need not disregard a vote if 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 it is cast by the person chairing the General 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 6 – Change of Name to Pyx Resources Limited

To consider and, if thought fit, to pass, with or without amendment, the following Resolution as a **Special Resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions for the purposes of section 157(1)(a) of the Corporations Act and for all other purposes, Shareholders approve, as a special resolution, a change of name of the Company from "South Pacific Resources Limited" to "Pyx Resources Limited"."

Resolution 7 – Election of Mr. Oliver Hasler as a Director

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purposes of clause 13.3 of the Company Constitution and for all other purposes, Mr. Oliver Hasler, being eligible and having consented to act, be elected as a Director of the Company, effective on Completion of the Acquisition."

Resolution 8 – Election of Mr. Bakhos Georges as a Director

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purposes of clause 13.3 of the Company Constitution and for all other purposes, Mr. Bakhos Georges, being eligible and having consented to act, be elected as a Director of the Company, effective on Completion of the Acquisition."

Resolution 9 – Election of Mr. Gary J. Artmont as a Director

To consider, and if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

"That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purposes of clause 13.3 of the Company Constitution and for all other purposes, Mr. Gary J. Artmont, being eligible and having consented to act, be elected as a Director of the Company, effective on Completion of the Acquisition."

Resolution 10 – Approval to Set Directors' Fees

To consider and, if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

“That, for the purpose of clause 13.8 of the Company Constitution and for all other purposes, Shareholders approve the maximum total aggregate fixed sum per annum to be paid to Directors be set at AUD\$700,000 per annum to be paid in accordance with the terms and conditions set out in the Explanatory Memorandum.”

Voting Exclusion Statement: The Company will disregard any votes cast in favour of the Resolution by or on behalf of:

- any Director of the Company; or
- an associate of those persons.

However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the direction on the Proxy Form, or it is cast by the person chairing the General Meeting as a proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

Chairman's Voting Intention: The Chairman intends to vote undirected proxies in favour of this Resolution.

Resolution 11 – Approval of Stock Incentive Plan

To consider and, if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

“That, for the purposes of ASX Listing Rule 7.2, Exception 9, the adoption of the Stock Incentive Plan, and future issuance of securities thereunder, as described in the Explanatory Memorandum, be approved.”

Voting Exclusion: The Company will disregard any votes cast in favour of the Resolution by or on behalf of:

- any director of the Company (except one who is ineligible to participate in the Stock Incentive Plan any employee incentive scheme in relation to the Company); or
- an associate of that person (or persons).

However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the direction on the Proxy Form, or it is cast by the person chairing the General Meeting as a 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 12 – Issue of Performance Rights and Shares to Mr. Oliver Hasler

To consider and, if thought fit pass, with or without amendment, the following Resolution as an **Ordinary resolution**:

“That, subject to and conditional upon the passing of the Acquisition Resolutions, for the purpose of ASX Listing Rule 10.14, and for all other purposes, approval is given for the issue of 17,675,376 Performance Rights and the issue of up to a maximum of 21,110,195 Shares that may result from the exercise of those Performance Rights upon satisfaction of the relevant milestones in respect of these Performance Rights to Oliver Hasler or his nominee(s) pursuant to the Company's Stock Incentive Plan as described in the Explanatory Memorandum.”

Voting Exclusion Statement: The Company will disregard any votes cast in favour of the Resolution by or on behalf of:

- any director of the entity who is eligible to participate in the Stock Incentive Plan; or
- an associate of those persons.

However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the direction on the Proxy Form, or it is cast by the person chairing the General Meeting as a proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

Chairman's Voting Intention: The Chairman intends to vote undirected proxies in favour of this Resolution.

Resolution 13 – Repeal and replacement of Company's Constitution

To consider and, if thought fit pass, with or without amendment, the following Resolution as a **Special resolution**:

“That, for the purposes of section 136(2) of the Corporations Act and for all other purposes, the Company repeal its current Constitution and adopt the New Constitution tabled at the Meeting with effect from the close of the Meeting, on the terms and conditions in the Explanatory Memorandum.”

Dated this 14 November 2019

By Order of the Board



Domenic Martino
Chairman

South Pacific Resources Limited

ABN 30 073 099 171

Explanatory Statement

This Explanatory Statement has been prepared for the information of Shareholders in connection with the business to be conducted at the General Meeting of the Shareholders of South Pacific Resources Limited (**Company** or **SPB**) to be held at Level 5, 56 Pitt Street, Sydney, New South Wales, Australia, 2000 at 11.00 am (AEDT) on 13 December 2019 (**General Meeting**).

Scope of Disclosure

The law requires that this Explanatory Statement sets out all information that is reasonably required by Shareholders in order to decide whether or not it is in the Company's interests to pass the Resolutions. The Company is not aware of any relevant information that is material to the decision on how to vote on the Resolutions other than is disclosed in this Explanatory Statement, or previously disclosed to Shareholders by the Company on the ASX.

Summary

The key business to be conducted at the General Meeting relates to the Company's proposed acquisition of Takmur Pte Ltd (**Takmur**) (**Acquisition**) and associated change to the nature and scale of the activities of the Company. The Acquisition will be implemented in accordance with the Share Purchase Agreement executed between the Company, Takmur and the shareholders of Takmur (**Vendors**) pursuant to which the Company has agreed to acquire all of the issued capital of Takmur in consideration for the issue for a total of 210,274,171 Shares to the Vendors (on a post Consolidation basis) (**Acquisition Shares**). The key dates regarding the General Meeting and the Acquisition are as follows:

Indicative Timetable*

1.	Dispatch of the Notice to Shareholders	14 November 2019
2.	Lodge Prospectus for Public Offer	21 November 2019
3.	Opening of Public Offer	21 November 2019
4.	Latest time for receipt of Proxy Forms	11 December 2019
5.	Snapshot date for eligibility to vote at the General Meeting	11 December 2019
6.	General Meeting to consider and vote upon the Resolutions	13 December 2019
7.	Closing of Public Offer	13 December 2019
8.	Shares issued under the Public Offer and Acquisition	16 December 2019
9.	New holding statements and certificates dispatched to Shareholders following completion of Public Offer	17 December 2019
10.	Normal trading of Shares resumes (subject to satisfaction of Chapters 1 and 2 of the ASX Listing Rules).	Estimated to be between 18 December 2019 and 14 January 2020

* The above dates are indicative only and are subject to change without notice. The actual timetable will depend upon the timing of ASX approval and also the time at which the conditions precedent to the Acquisition are satisfied or, if applicable, waived. Further details of the conditions precedent are set out in Section 1.2 of this Explanatory Statement. The Company has the right to vary any or all of these dates and times, subject to the approval of such variation by ASX where required. Any variation to the timetable set out above will be announced to ASX.

1. Brief History of the Company and Background to Resolutions 1 to 13

1.1. Background to the Company

The Company is an oil & gas exploration company, which operates and holds a 100% working interest in five petroleum exploration licenses in Papua New Guinea that cover a total area of 11,972km² in both onshore and offshore settings. Four of these licenses are in the Papuan Basin. They are located close to existing producing oil and gas fields and associated production infrastructure. The fifth is in the Cape Vogel Basin, a lightly explored offshore frontier basin where natural oil & gas seepages have been reported.

The Directors have resolved, subject to Shareholder and regulatory approval, to change the nature of the business from petroleum assets acquisition and exploration to mineral sands exploration and production. This will be achieved by disposing of all of the shares held in Indo Pacific Energy Pty Ltd (**IPEL**) (including its fully owned subsidiary Coral Sea Petroleum (PNG) Limited), Pacific Shale Gas Ltd and South Pacific Resources Limited (PNG) by the Company on the terms and conditions of the Disposal and by acquiring Takmur on the terms and conditions of the Acquisition.

1.2. The Takmur Acquisition

1.2.1. The Takmur Acquisition

Terms of the Acquisition

The Company has entered into the Share Purchase Agreement to acquire all the issued capital in Takmur Pte Ltd (**Takmur**) from the Vendors in consideration for the issue of the Acquisition Shares.

Completion of the Takmur Acquisition is subject to satisfaction (or waiver) of the following conditions precedent:

- (a) due diligence investigations by the Company in respect of Takmur, its shareholders and its Projects including legal, financial and technical due diligence, and the results of the Company's due diligence being entirely to the Company's satisfaction;
- (b) due diligence investigations by Takmur in respect of the Company including legal and financial due diligence, and the results of Takmur's due diligence being entirely to Takmur's satisfaction;
- (c) SPB Shareholders approving the resolutions as per the notice of general meeting issued by the Company on 17 July 2019;
- (d) the close of the Public Offer;
- (e) approval, in principle, from the ASX for relisting and re-admission of its securities to the Official List;
- (f) evidence satisfactory to the company that Takmur has executed and delivered all relevant documentation (including share certificates, stock transfer forms or otherwise) pertaining to 100% of the issued share capital of Takmur to the Company;
- (g) the parties obtaining all relevant approvals, including shareholder approval, board approval and any third party consents necessary to implement the Acquisition, including:
 - i. the issue of the Acquisition Shares;
 - ii. the Consolidation of the Company's issued capital;
 - iii. Shareholder approval of a change in nature and scale of the Company; and
 - iv. the issue of the Shares under the Public Offer.

The Acquisition Resolutions are conditional on each other. That is, should any of the Acquisition

Resolutions not be approved by Shareholders, the Acquisition will not proceed.

As at the date of this Notice, conditions precedent (a), (b) and (c) above have been satisfied.

Under the Share Purchase Agreement, the current Board of the Company will resign, with the exception of Mr Alvin Tan, and the Company will appoint three persons to the board of directors of the Company on Completion of the Acquisition, being Oliver Hasler, Gary J Artmont and Bakhos George (**Proposed Directors**). Shareholder approval for the appointment of the Proposed Directors is sought pursuant to Resolutions 7 to 9. Profiles of the Proposed Directors are provided in section 2.3.

Consolidation

The Company will consolidate its existing capital on a one Share for every twenty Shares basis.

The important dates that the Company will be following in accordance with Appendix 7A of the ASX Listing Rules for the Consolidation are as follows:

Event	Date
Date of General Meeting	13 December 2019
Consolidation Date	13 December 2019
Issue and allotment of Shares of a post consolidation basis	16 December 2019
Dispatch date for post-Consolidation holding statements	17 December 2019

1.2.2. Public Offer

The Company will be required to raise capital for the purposes of achieving its business objectives and satisfying the requirements of the ASX Listing Rules in relation to the re-listing of its securities. Prior to the General Meeting, the Directors intend to prepare a disclosure document to raise AU\$14,000,000 through the issue of up to 35,000,000 Shares (on a post-Consolidation basis) at an issue price of AU\$0.40 per Share.

The Directors anticipate that the Prospectus will be lodged prior to the General Meeting convened under this Notice.

1.2.3. Regulatory Information

As noted above, Shareholder approval of the Acquisition Resolutions is a condition precedent to Completion of the Acquisition under the Agreement.

Item 7 Section 611 of the Corporations Act

Section 606 of the Corporations Act prohibits a person acquiring a relevant interest in issued voting shares in a company if, as a result of the acquisition, that person's or someone else's voting power in the company increases from less than 20% to more than 20%, or from a starting point that is above 20% and below 90%.

The voting power of a person in a body corporate is determined under 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.

For the purposes of determining voting power under the Corporations Act, a person (**Second Person**) is an "associate" of the other person (**First Person**) if:

- 1) (pursuant to Section 12(2) of the Corporations Act) the First Person is a body corporate and the Second Person is:
 - a. a body corporate that the First Person controls;

- b. a body corporate that controls the First Person;
 - c. a body corporate that is controlled by an entity that controls the person;
- 2) the Second Person has entered or proposes to enter into a relevant agreement with the First Person for the purpose of controlling or influencing the composition of the Company's Board or the conduct of the Company's affairs; or
 - 3) the Second Person is a person with whom the first person is acting or proposes to act, in concert in relation to the Company's affairs.

Section 608(1) of the Corporations Act provides that a person has a "relevant interest" if they:

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

It does not matter how remote the relevant interest is or how it arises. If two or more people can jointly exercise one of these powers, each of them is taken to have that power.

Item 7 of Section 611 provides an exception to the prohibition in Section 606, in circumstances where the shareholders of the Company approve an acquisition of shares by virtue of an allotment or acquisition at a meeting at which no votes are cast by parties involved in the proposed acquisition, including their associates.

Section 611 approval is required in this case as Post-Acquisition the Company will issue 210,274,171 (79.8%) of the total issued shares of the Company to the Vendors, and therefore collectively the Vendors will be in a position to control the Company. However it is noted that the Vendors are unrelated to each other, except for being shareholders of Takmur.

In particular, both Phoenix Fund Solutions Limited and Takmur SPC Limited will acquire more than 20% interests in the Company, appoint two board members and, with 35.1% and 31.9% ownership respectively (post-Transaction), will have the ability to block special resolutions proposed by the Company. Accordingly, Shareholder approval is being sought pursuant to item 7 section 611 of the Corporations Act for the issue of the Acquisition Shares to the Vendors.

Phoenix Fund Solutions Limited and Takmur SPC Limited are unrelated to each other.

Shareholders should consider the Independent Expert's Report and the balance of this Explanatory Memorandum for further details on the effect of the Acquisition, including certain prescribed information.

1.3. Advantages and Disadvantages of the Acquisition

1.3.1. Advantages

The Acquisition and the change in nature and scale of the Company's activities are consistent with the expansion and recapitalisation objectives of the Company. If Shareholders do not pass the Acquisition Resolutions, completion of the Acquisition will not occur and the Company will be restricted to its present level of activity.

The Directors are of the view that the following non-exhaustive list of advantages may be relevant to a Shareholder's decision on how to vote on the Acquisition Resolutions:

- the Directors have been actively seeking opportunities to improve Shareholder value. The Directors believe the Acquisition is such an opportunity;
- the Directors are of the view that the change in nature of the Company to a heavy mineral sands producer will deliver value to existing and new Shareholders;

- the Directors believe that the Acquisition represents an opportunity for the long-term growth of the Company;
- the Independent Expert has concluded that the Acquisition is fair and reasonable to the non-associated Shareholders;
- the Acquisition and associated capital raising will allow the Company to maintain its ASX Listing and provide a liquid market for the existing Shareholders;
- the Acquisition and the passing of the Acquisition Resolutions will increase the cash position of the Company substantially; and
- the Acquisition and the passing of the Acquisition Resolutions will enable the Company's business to be re-positioned as an owner of high quality mineral sands assets that are in production and cash flow positive in an industry which presents significant upside potential and compelling investing opportunities.

1.3.2. Disadvantages

The Directors consider that the key disadvantages of the Acquisition are as follows:

- the Company will be changing the nature of its activities from an oil and gas exploration and production company to a mineral sands exploration and production company, which may not be consistent with the objectives of all Shareholders;
- there are many risk factors associated with this change in nature of the Company's activities. Some of these risk factors are set out in section 3.7 of this Explanatory Statement;
- the issue of the Acquisition Shares to the Vendors and the Public Offer will dilute the shareholding of current Shareholders. Accordingly, the voting power of each current Shareholder and any corresponding control over the affairs of the Company that those Shareholders may have, will be reduced on completion of the Acquisition;
- Following the completion of the Acquisition some of the Vendors will have a voting power of more than 10%, which may deter a takeover offer for the Company as either of these Vendors will be able to block a compulsory acquisition of the Shares for as long as it holds more than 10% of the number of Shares on issue; and
- The Acquisition and the passing of the Acquisition Resolutions will result in the Company undertaking a significant new business and as such may expose the Company to larger expenditure than currently being experienced by the Company or risks that the Company otherwise might not be subject to, including sovereign risk relating to Indonesia.

Shareholders should have regard to the Independent Expert's Report included with this Notice which contains further details of the Acquisition and its effect upon the Company.

1.4. SPB Share Capital Post Transaction

The capital structure of the Company prior to the Transaction taking place and post Transaction (should all Resolutions be passed) is as follows:

	Number of Shares	Percentage of SPB ownership
SPB Ownership Prior to the Transaction		
Current SPB Shareholders (pre-Consolidation)	365,694,211	100.00%
Current SPB Shareholders (post-Consolidation)	18,284,711	100.00%
SPB Ownership Post Transaction		
Current SPB Shareholders (post-Consolidation)	18,284,711	6.9%
Issue of Shares to Vendors for Acquisition	210,274,171	79.8%
New Shareholders under Public Offer	35,000,000	13.3%
Total Shares on issue Post Transaction	263,558,882	100.0%

The effect of the proposed Transaction on current shareholders of SPB is to reduce their percentage shareholding in the Company from 100% to 6.9% post Transaction.

1.5. Independent Expert's Report

Under the ASIC regulatory guidance, the Company is required to engage an independent expert to review the acquisition as per RG 74.31 (and other association regulatory guidance provisions and Corporations Act) and to provide the shareholders with an opinion as to whether or not the Acquisition is "fair and reasonable" to members for the purposes of approval under section 611 (item 7) of the Corporations Act.

The Independent Expert's Report also contains assessments of the advantages and disadvantages of the Acquisition and is intended to assist all members of the Company in deciding how to vote on the resolutions set out in this Notice.

The Company has engaged Stantons to prepare the Independent Expert's Report which is attached at Schedule 1 to this Notice. Stantons has opined that this transaction is fair and reasonable to the non-associated Shareholders of the Company.

Shareholders are urged to carefully read the Independent Expert's Report in relation to the Acquisition to understand the scope of the report, the methodology of the assessment, the sources of information and any assumptions made.

2. Profile of Takmur Pte Ltd

2.1. Company Overview

Takmur Pte. Ltd. (**Takmur**) has exclusive rights to the operation and management of PT Investasi Mandiri (**Mandiri**) which holds the Mandiri Tenement and Mandiri Project, a premium quality mineral sands project in Indonesia. Takmur's objective is to build shareholder value by adding premium quality mineral sands tenements to its portfolio both in Indonesia and globally. The capital raising and cash flow generated in the short term will be used to further develop the Mandiri Project and production facilities and may be further used to acquire other projects.

Takmur (though its control of Mandiri) is currently focused on the Mandiri Tenement in Central Kalimantan, a fully licensed mineral sand project which has already started production, having achieved an export volume in excess of 3,000 tons of Zircon in 2018, and with significant upside potential in terms of prospective resources and increase of production capacity. Further details of the Mandiri Tenement and Mandiri Project are provided below at section 2.5 of this Explanatory Statement.

Ultimately, Takmur aims to become a significant mineral sands player and supply world markets with premium quality zircon, securing an important role in the rapidly growing zircon industry.

2.2. Overview of Mandiri Project held by Takmur

The Mandiri mineral sands project (**Mandiri Project**) consists of a concession area of 2,032 hectare located in Central Kalimantan Province, Indonesia for mineral sands exploration and premium grade Zircon production and export. The Mandiri Project is located in the Kuala Kurun administration area, within the Gunung Mas Regency in Central Kalimantan and is approximately 170 km north of the provincial capital city Palangkaraya.

A processing plant has been built and forms part of the Mandiri Project. The plant incorporates the standard Heavy Mineral processing equipment in the form of dryers, shaking tables, electro-static separators and electro-magnetic separators.

Mineral Sand Extraction, Mining and Separation Process

Mineral sand is extracted from the Mandiri Tenement with diesel pumps which suck soil from shallow ponds into riffle boxes, enabling the concentration of Valuable Heavy Minerals into a feedstock referred to as Heavy Mineral Concentrate (HMC).

HMC is then transported from Mandiri's Tenement to Mandiri's processing plant which is located 23 km to the South of the Mandiri's Tenement, to obtain zircon sand as finished product.

PT Mandiri has engaged experienced contract miners on the Mandiri Tenement to firstly extract mineral sand; then concentrate the Valuable Heavy Minerals into HMC; and finally transport HMC from the Mandiri Tenement to Mandiri's processing plant.

Mandiri's processing plant only processes feedstock supplied by 11 contract miners formally engaged by PT Mandiri through written agreements, in compliance with local mining laws and regulations. The agreements stipulate that the contract miners operate exclusively within a specified area of the Mandiri Tenement and only to operate in accordance with local mining laws and regulations under management supervision and monitoring, and subject to pre-agreed standards of operation and execution.

PT Mandiri's management and its security unit continuously monitor the Mandiri Tenement's secured entry points and a number of strategies are employed. These include random identification checks and meetings with engaged contractors on a regular basis to ensure compliance with Company standards and adherence to law. Regular tenement inspections are carried out to ensure accurate traceability of feedstock sourcing, compliance of contract miners to the terms of engagement and to prevent trespassing by non-authorized persons.

Contract miners are compensated for their labor and expenses based on the tonnage and the Zirconia (ZrO_2) content of the HMC feedstock delivered to the processing plant. The engagement agreements do not allow contract miners to extract minerals other than HMC from the Mandiri Tenement, nor to retain, sell or dispose of any mineral from the Mandiri Tenement.

Following the mineral sand extraction at the Mandiri Tenement and the processing of HMC at the processing plant, sand, clay and other leftovers from the extraction process are stockpiled at the Mandiri Tenement, while leftover black heavy minerals are stockpiled at the processing plant. Both sand, clay and black heavy minerals are then disposed of in accordance with local mining laws and regulations and in compliance with local environmental regulation.

At present, PT Mandiri only sells domestically and internationally 65.5 grade Zircon, in accordance with the terms and conditions of its mining and production license.

Risk of Past Illegal Mining Activities and Mitigating Factors

The Directors have evaluated the risk of possible illegal mining activity on the Mandiri Tenement prior to the acquisition of control by current management. In particular, the Directors have considered the risk arising from the activity of artisanal miners on the site extracting and retaining non-zircon minerals and the risk of sourcing HMC feedstock for the processing plant from outside the Mandiri Tenement area.

Neither the Company nor the Directors have found evidence of illegal mining on the Mandiri Tenement and will continue to ensure this does not occur by conducting operations in accordance with best industry practice.

As with any mining project it can not be stated with 100% certainty that all activity that has ever occurred on the Mandiri Tenement has been in strict compliance with all applicable law, the Directors have taken all reasonable steps to investigate this possibility and have not found any evidence of illegal mining activity during the course of their investigations. The Company is of the view that this risk is further mitigated as the Mandiri Tenement has been declared 'Clean and Clear' by the Indonesian Ministry of Energy and Mineral Resources with this certification being obtained on 22 September 2014.

In order to obtain a Clean and Clear Certificate an operating entity must prove that they have:

- no outstanding royalty obligations and that all taxes are up to date and fully paid;
- contributed all required funds for rehabilitation obligations to be met;
- fulfilled all applicable exploration and environmental commitments; and
- demonstrated that licence areas do not overlap with any protected areas or other companies licence areas.

As part of their due diligence, the Directors have received confirmation that PT Mandiri has not received any notification by local authorities nor was part in any legal proceeding in relation to any illegal mining activities performed on the Mandiri Tenement or any other activity that could impact its Clean and Clear Certificate, nor has received any formal request for clarification in relation to the sourcing of HMC feedstock for the Mandiri processing plant.

Current management of PT Mandiri has implemented a series of best practices and controls which will reduce and mitigate any risk of future illegal mining activity on the tenement, and in particular:

- Has ensured that all engagements of contract miners are done exclusively through written agreements, in accordance with local mining laws and regulations;
- Maintains procedural in-bound checks at the processing plant, including CCTV cameras, to ensure HMC feedstock is exclusively sourced from contract miners engaged by PT Mandiri according to pre-agreed terms and conditions;
- Has set up and maintained regular monitoring of the Mandiri Tenement entry points through regular tenement inspections by Mandiri employees and its security unit, to ensure compliance of contract miners to the terms of engagement and to prevent trespassing by non-authorized persons;
- Has put in place standard control and operational procedures which are implemented on site to enable the stockpiling and disposal of extraction waste and processing waste both at the Mandiri Tenement and at the processing site, in accordance with applicable mining laws and regulations.

2.3. New directors and management

The directors and officers proposed by the Vendors have significant management experience and have operated in various regions, including Europe, China, South East Asia and Australia.

OLIVER HASLER; Chairman of the Board and Chief Executive Officer

Oliver is an accomplished chief executive, president and board member successfully leading world-class businesses and brands spanning multiple industries and markets, including natural resources, agriculture, innovative manufacturing and various industrial sectors.

His most recent accomplishment was the successful transformation of the publicly-traded Spanish paper and packaging company, Europac Group, in a short span of 3 years into a mid-cap company with its market capitalization exceeding US\$2 billion. Moreover, other major projects Oliver has participated include revision to the strategy of the Professional Division of Douwe Egberts, which is headquartered in the Netherlands, and its joint venture with U.S.-based Mondelez, and the restructuring of France's Arc International.

Oliver has over 20 years of experience in doing business in Asia, where he has built and operated factories, as well as setting up distribution networks throughout the region and managing significant export and import operations.

Oliver is a Swiss citizen with a Master's degree in Materials Engineering and a Master's degree in Metallurgy from Federal Institute of Technology in Zurich, Switzerland and an MBA with honors from the Universidad Iberoamericana in Mexico City. He is fluent in English, German, Spanish and French.

BAKHOS GEORGES; Director

Bakhos has more than forty years of experience in management and operation in the retail, pharmaceutical and wholesale sectors, with specific focus on pharmacy supply chain in Australia and import/export industries.

Bakhos has received the Order of Australia Medal (OAM) in 2019 for service to the community. He currently serves as Director of Saint Charbel's Aged Care Centre and is a Justice of the Peace (JP) in and for the State of New South Wales.

Bakhos received a B.Ph.Chem from USMV in 1982.

GARY J. ARTMONT; Director

Gary has forty-six years of experience in the mining business operating in 21 countries and familiar with all aspects of mineral exploration from grassroots to project pre-feasibility studies through to mining operations.

Gary is a fellow member of AUSIMM #312718 qualified to write NI 43-101 or JORC Competent Person reports for various exchanges and is experienced in the management of large multifaceted regional and detailed exploration programs in overseas locations with 14 years working in tropical environments.

Gary worked as a geologist and project manager for multiple organizations over the past four decades, including Geostar Consulting, Rio Tinto, PT Pelsart Indonesia, PT Freeport Indonesia and Ivanhoe Mining China.

Gary earned a Bachelor Degree from Waterloo University, Ontario.

2.4. Takmur's capital structure

At present, Takmur has 2,500 fully paid ordinary shares on issue held by the following:

Shareholder	No. of Takmur shares held	% in Takmur
Phoenix Fund Solutions Limited*	1,100	44%
Takmur SPC Limited*	1,000	40%
Sinowide International Limited	135	5.4%
Unico Holdings Limited	135	5.4%
Sino Ventures Limited	130	5.2%
TOTAL	2,500	100%

* Phoenix Fund Solutions and Takmur SPC Limited are Takmur founders.

2.5. Mandiri Project

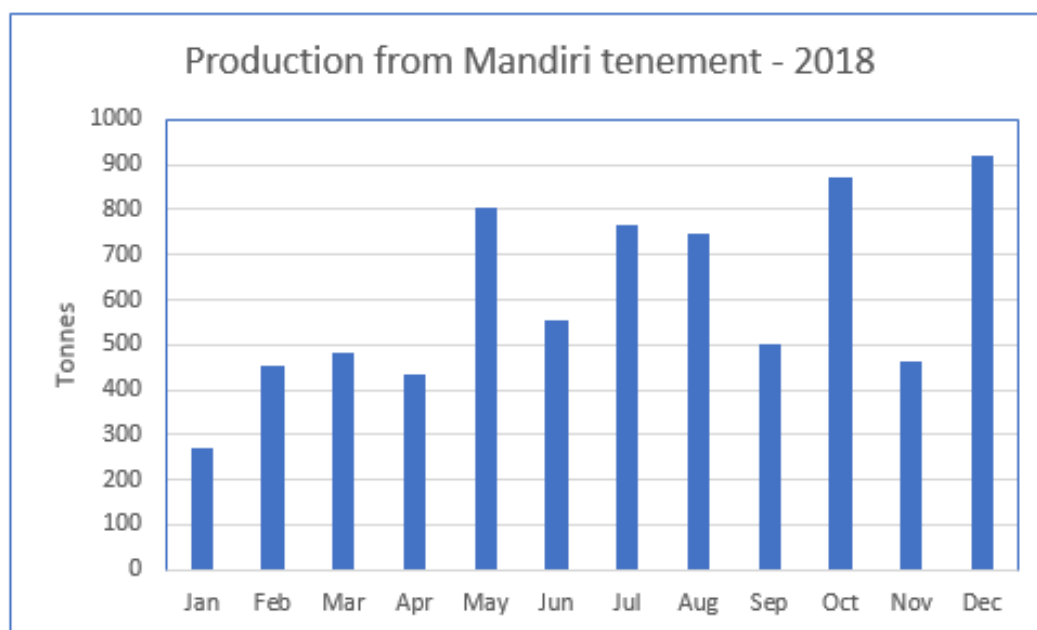
Takmur's principal focus is on the exploitation and exploration of its Mandiri mineral sands project located in the Province of Central Kalimantan, Indonesia. The Mandiri Project is Takmur's principal asset.

The Mandiri Project consists of a concession area of 2,032 hectares located in Central Kalimantan Province, Indonesia for mineral sands exploitation and a processing plant for valuable heavy mineral separation. The Mandiri deposit is located in the Kuala Kurun administration area, within the Gunung Mas Regency in Central Kalimantan and is approximately 170 km north of the provincial capital city Palangkaraya. The tenement can be accessed by commercial flights from Jakarta to Palangkaraya in 1 hour and 20 minutes. From the airport, the drive to the tenement area takes about 4½ hours.

The concession is held by PT. Investasi Mandiri (**Mandiri**) under mining permit Izin Usaha Pertambangan – Operasi Produksi (IUP-OP) No. 16/DPE/IX/2010 issued by Bupati Gunung Mas on 2nd September 2010 (**Mandiri Tenement**). Mandiri has exclusive rights to perform exploration and mining works in the Mandiri Project area. An Indonesian legal opinion on title is included in the Notice at Schedule 5.

In accordance with Indonesian minerals legislation it is a requirement to construct a processing plant in order to obtain an export permit for minerals. Consequently, Mandiri have a heavy mineral sands (**HMS**) processing plant that forms part of the Mandiri Project. The plant is currently in operation and produced in excess of 3,000 tons of zircon in 2018, processing 7,269 tons of Heavy Mineral Concentrate derived from the Mandiri Project.

Exhibit 2.1: Monthly HMC Processing from the Mandiri Project



The mineral assemblage of the Heavy Mineral Concentrate from the Mandiri deposit is well established and confirmed by the certified laboratory analyses required by legislation for export product from Indonesia (Exhibit 2.2). Shareholders should refer to Schedule 1 including the Technical Report and JORC table included as part of that Report for detailed discussion on the below.

Exhibit 2.2: Mineralogical composition of a 551t dry weight feedstock sample from the Mandiri Tenement processed through the PTIM plant

Mineral	Weight	Relative %
Zircon	358 t	64.97 %
Mixed ilmenite	104 t	18.87 %
Rutile	13 t	2.36 %
Monazite mix	4 t	0.73 %
Trash	72 t	13.07 %
Gold	1,041 g	1.89 g/t
Total	551 t	100.00 %

Note: The feedstock sample was obtained via contracted artisanal miners who are only engaged for the purposes of extracting Zircon.

The relative percentage of the minerals comprising the mineral assemblage for the Mandiri HMS target based on actual production data for a 12 month period from the PTIM processing plant and supported by chemical analyses is consistent with the results of the mineralogical composition of the 551 t sample referred to in Exhibit 2.2. All data used in the above analysis was supplied by PTIM during the actual site visit in January 2019.

The Mandiri Tenement contains heavy mineral sand mineralisation, hosted in Holocene age alluvium the product of an ancient Kahayan river channel and flood plain. The sediment is comprised mainly of unconsolidated sands and contains some 25% clay and silt. The area is geologically relatively simple with an alluvium layer generally of 2 to 6 m in thickness with some areas having up to 11 m in thickness. The alluvium bed is overlain by a Miocene age coal-bearing sequence called the Werukin Formation.

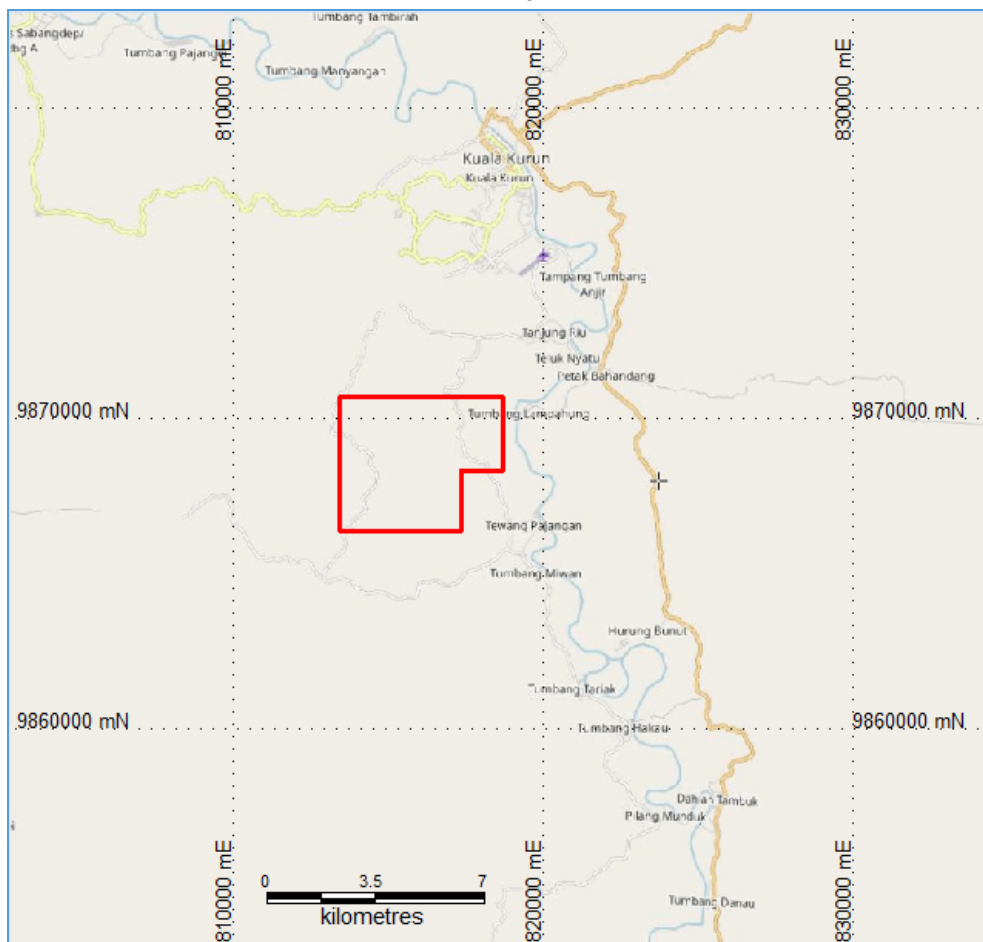
The Inferred Mineral Resources for the Mandiri HMS deposit are defined as 126 Mt containing 7% HM, 9% slimes and 16% oversize at a lower cut-off grade of 2%. Based on the data available, the tonnage of contained zircon, ilmenite and rutile which together comprise the VHM is 7.59 Mt.

2.5.1. Location and Access

The Mandiri deposit is located in the Kuala Kurun administration area, within the Gunung Mas Regency in Central Kalimantan and is approximately 170 km north of the provincial capital city Palangkaraya.

The Mandiri Tenement can be accessed by commercial flights from Jakarta to Palangkaraya in 1 hour and 20 minutes. From the airport, the drive to the Mandiri Tenement area takes about 4½ hours.

Exhibit 2.3: Location Plan of the Mandiri Project



2.5.2. Permitting and Licensing

Granting of the IUP-OP to Mandiri was for a total area of 2,032 ha, by Bupati Gunung Mas, No. 16/DPE/IX/2010, on 2nd September 2010 and are entirely in Resettlement and Other Use Areas (PPI). The condition of land cover consists of 40% of secondary forest, 30% bush, 15% of community garden, and the remaining 15% is open area which is the location of former mining (gold & zircon).

An Indonesian legal opinion is included in this Notice at Schedule 5.

The conditions of grant including Indonesian taxes and other financial obligation of Mandiri are set out in the IUP. A summary of some of the key provisions are as follows:

- Dead rent is payable to Government of Indonesia at rate of US\$4 per hectare per annum.
- Royalty on thermal Heavy Mineral Sand produced is 3%.
- Corporate tax of 25% is payable and set by the Government of Indonesia.

- A withholding tax is payable on interest and dividends. This is set at 5% to 30% for non-resident foundation shareholders, but will increase to 20% for non-resident shareholders who are not foundation shareholders (this rate being relevant to Mandiri).
- Mandiri shall collect, remit and report VAT on the delivery of taxable goods and or service at a rate of 10%.
- Land and building taxes payable to the local government are applicable, at rate of US\$0.53 per hectare.
- Environmental obligations including reclamation bonding and plans have been approved by local government as part of the mine approval process.

The development of HMS occurrences in Indonesia consists of obtaining approval from the central government for three progressive stages:

- Exploration stage - to obtain approval for detailed exploration work comprising drilling, sampling, HMS grade analysis, geophysical logging, topography survey and bulk sampling.
- Feasibility study stage - to obtain approval for advance exploration and technical constraint work comprising mine method and design, geotechnical constraint, capex - opex study, financial model, HMS beneficiation study, market analysis, social - culture - environment study. This stage is based on findings from the exploration stage. An environment impact analysis document is also required in the stage as a step towards the production stage.
- Production stage (IUP-OP) - to obtain approval in principal for executing HMS mining operation based on feasibility report and impact analysis document. The IUP-OP was granted to Mandiri in March 2010 and an Indonesian legal opinion on title is included at Schedule 5 to this Notice.

2.5.3. Environment, social and cultural factors

Mandiri has advised the Company that it is currently not facing any environmental or social litigation and has commenced exploration activities and feasibility studies in accordance with applicable regulations. The Mandiri Tenement is situated in a production forest area. Some areas are overlapping with community rice farming and traditional hunting grounds. The community which is of multi-ethnic backgrounds is supportive of Mandiri's plans to further develop the Mandiri Project.

The Mandiri Project is situated on the flood plain of the Kahayan river, legally classified into production forest area and conversion production forest area, but with tribal land ownership also established on it. The land has recently been used for traditional plantations, rice farming and gold mining, which covers most of the Mandiri Tenement area.

2.5.4. Regional Mineralisation

Historically, the sedimentary basins of Central and Western Kalimantan have been mined for alluvial gold and in some areas also for diamonds. More recently, it has been recognised that the alluvium hosting the gold is also prospective for HMS.

In 2017 Indonesia was ranked 4th in world zircon production with production of 120,000 metric tonnes.

2.5.5. Mandiri Project Geology

Regional Geology

The Mandiri Tenement is situated on the anticlinorium complex within Barito Basin with a pull apart sedimentary basin, occurring in Paleogene age, in Central Kalimantan. Mandiri syncline stratigraphy consists of Tertiary sedimentary rocks sequences; Middle Miocene to Holocene age.

Exhibit 2.4: Simplified Geological Plan of Kalimantan Island



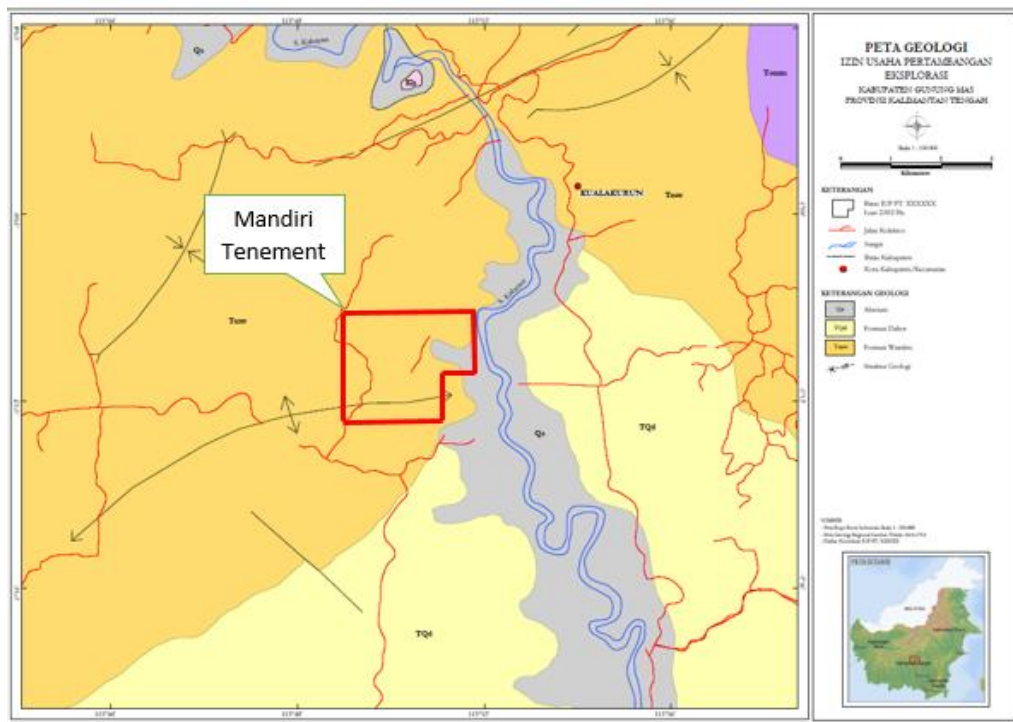
Generally, the HMS deposit within the Mandiri Tenement is a deposit formed commonly in flood plain environment by concentration (enrichment) of heavy minerals (mostly zircon ($ZrSiO_4$) – rutile (TiO_2) – leucoxene ($FeTiO_3, TiO_2$) and ilmenite ($FeTiO_3$)), table 1. Zircon is the most valuable component; thereafter rutile, leucoxene and ilmenite in terms of value given to the ore.

Exhibit 2.5: Common Mineral Sands, Physical Properties and Chemistry

Mineral	Valuable	Magnetic Susceptibility	Electrical Conductivity	SG	Chemical Formula
Ilmenite	Yes	High	High	4.5 - 5.0	Fe.TiO_3
Rutile	Yes	Low	High	4.2 - 4.3	TiO_2
Zircon	Yes	Low	Low	4.7	ZrSiO_4
Leucoxene	Yes	Semi	High	3.5 - 4.1	$\text{Fe.TiO}_3.\text{TiO}_2$
Monazite	No	Semi	Low	4.9 - 5.3	$(\text{Ce,La,Th,Nd,Y})\text{PO}_4$
Staurolite	No	Semi	Low	3.6 - 3.8	$\text{Fe}_2\text{Al}_9\text{Si}_4\text{O}_{22}.\text{(OH)}_2$
Kyanite	No	Low	Low	3.6 - 3.7	Al_2SiO_5
Garnet	No	Semi	Low	3.4 - 4.2	$(\text{Fe,Mn,Ca})_3.\text{Al}_2(\text{SiO}_4)_3$
Quartz	No	Low	Low	2.7	SiO_2

Source: Iluka

Exhibit 2.6: Geological Map of the Mandiri Tenement Area



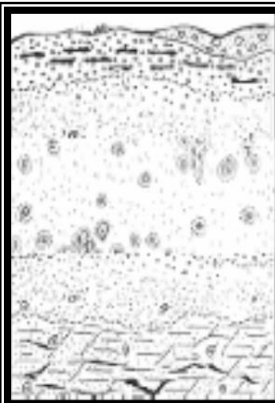
2.5.6. Mandiri Project Exploration History

Early stage exploration work which covered the Mandiri Tenement commenced in November to December 2018 to obtain initial information including 200 meters spacing auger drilling campaign and geology surface mapping work. Due to water interference impacting upon the holes' wall stability; most of the drill holes did not touch the basement unit. A full HMS stratigraphy sequence was not able to be obtained during this campaign.

The Mandiri Tenement is generally poorly stratified and contains a fraction of slimers (clay and silt of about 24% to 30%) at various thickness and grade. The heavy mineral bearing sand formation presents reasonably simple targets for the type of exploration. The Company is of the opinion that further exploration is required and intends to conduct a campaign following completion of the Acquisition.

The typical vertical profile of HMS bearing strata across the Mandiri Tenement is set out below:

Exhibit 2.7: Vertical Profile of Mandiri Heavy Mineral Sand Property

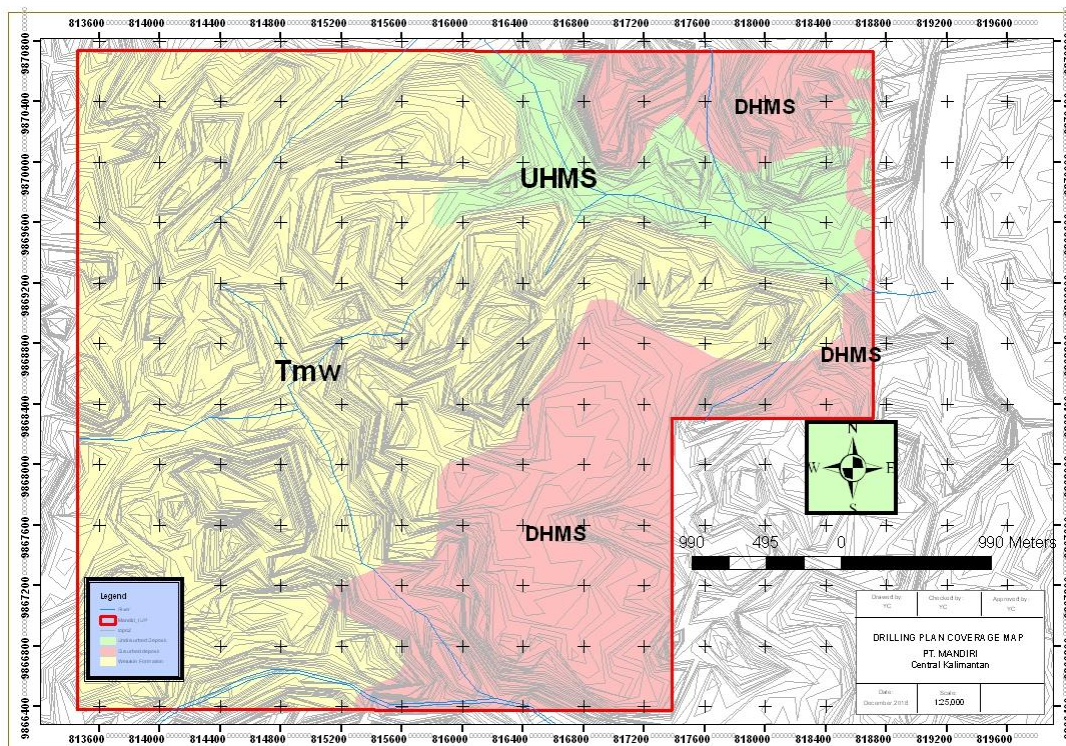
	Top Soil	Brown, stiky, root plants,
	Sand Strata 1	white sand strata fine grain contain clay and silt fraction, sub angular, moderate sorted, dominated by qz, zr, rutile, leucoxene
	Sand Strata 2	white sand strata medium to coarse grain contain clay and silt fraction, sub angular, moderate sorted, dominated by qz, zr, rutile, leucoxene
	Sand Strata 3	white sand strata fine grain contain clay and silt fraction, sub angular, moderate sorted, dominated by qz, zr, rutile, leucoxene
	Werukin Basement	white sandstone, pale grey mudstone, dark brown carbonaceous mudstone and coal

The HMS deposit covers about 760 ha or 37% of the total Mandiri Tenement area. Approximately 78% of 760 ha has been disturbed and is classified as such in the figure below (DHMS). The DHMS deposit is still in basin but in chaotic material heaps due to local artisanal gold workings. The DHMS deposit is not eligible to be estimated or included in a resource statement.

Geological Mapping

General geological mapping was commenced in November 2018 over an area of 1,550 hectares. Mandiri applied best practice of surface geological mapping procedure on a flood plain area, which is in compliance with the Indonesia National Standard (SNI). The technical team commenced work by using handheld GPS and applying tape and compass along the proposed traverse line in grid formation and along creeks and foot-tracks where possible to observe the outcrops. Actual traverse line, point of observation and marking points were properly recorded and saved in Mandiri's data base. The alluvium strata, Tertiary sediment unit and structural geology outcrops were treated according to SNI technical procedures. Traverse lines were extended until the boundary of the Mandiri Tenement. The completed HMS geology surface map was interpreted for Mandiri and provides the actual HMS occurrence boundary as set out below.

Exhibit 2.8: Geology Map of Mandiri Property



2.5.7. Mandiri Project Mineral Resources

Resource Tables

Mineral resources within the Mandiri Tenement are set out below. The resources are reported at a lower block cut-off grade of 3% heavy minerals (HM) which includes zircon, magnetite, ilmenite and rutile.

Exhibit 2.9: Mineral Resources above 3% HM lower block cut-off grade (unrounded)

Area	Category	Tonnage (Mt)	HM (%)	Slimes (%)	Oversize (%)
Mandiri	Inferred	126.3	7.43	8.98	16.14

The Inferred Mineral Resources for the Mandiri HMS deposit on the Mandiri Tenement are defined as 126 Mt containing 7% HM, 9% slimes and 16% oversize at a lower cut-off grade of 2%.

The mineral assemblage for the Mandiri HMS deposit is based on production data from the Mandiri Project processing plant.

Exhibit 2.10: Inferred Resources by Lower Block Cut-off grade (Unrounded)

Component	Zircon	Ilmenite	Rutile	Other	Waste + h2o	Total
Relative %	68%	9.5%	8.5%	1%	13%	100%
Contained mineral	6.00 Mt	0.84 Mt	0.75 Mt	0.09 Mt	1.15 Mt	8.82 Mt

Based on the data available, the tonnage of contained zircon, ilmenite and rutile, which together comprise the valuable heavy minerals, is 7.59 Mt.

Resources are given at various lower block cut-off grades of contained HM.

Exhibit 2.11: Inferred Resources by lower block cut-off grade (unrounded)

Category	Cut-off Grade (% HM)	Cumul. Tonnage (Mt)	HM (%)	Slimes (%)	Oversize (%)
Inferred	8	43.3	8.47	9.23	16.42
	7	88.4	7.99	9.18	16.19
	6	112.2	7.70	9.10	16.18
	5	125.0	7.53	9.01	16.25
	4	126.1	7.48	8.99	16.20
	3	126.1	7.44	8.99	16.16
	2	126.3	7.43	8.98	16.14

Note: Mt = million tonnes

There is only minor material less than 2% HM.

Exploration Potential

- Heavy Mineral Sands

The main area for potential mineralisation is below the water table as the auger drilling only tested the alluvial zone above the water table. The deepest auger hole that intersected bedrock was 10 m in depth. It is most likely that an additional resource will be located below the currently defined resource. Testing this zone will require drilling using an air-core mechanised drilling rig.

In addition to the exploration targets below the water table there is the potential for additional HMS mineralisation to be located to the west of the current resources below the younger Werukin Formation.

Potential resources can be termed as an exploration target which is an estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade, relates to mineralisation for which there has been insufficient exploration to estimate a mineral resource.

In the case of the Mandiri Tenement the Exploration Target for HMS within the Mandiri Tenement is in the order of 25 – 30 Mt of sand containing 4 - 7 % heavy minerals.

- Gold

It is not the current intent of the Company to pursue exploration for gold, nor does the Company currently intend to seek any licences to extract or produce gold. Shareholders should be aware that this information is being provided for disclosure purposes only and are merely statements of fact.

The Mandiri Tenement is known to contain alluvial gold which is being exploited by artisanal miners. It is not known how much gold the artisanal miners are producing but significant quantities of gold are being recovered by the Mandiri Project processing facility which purchases heavy mineral concentrate from the artisanal miners.

Two analytical certificates accompanying rutile concentrate for export report gold values of 17 g/t and 37 g/t. In addition, platinum is reported at levels of 215 g/t and 101 g/t.

2.5.8. Mandiri Processing Plant

The purpose of the processing is to separate the valuable heavy mineral sand from the non-valuable and lighter gangue that makes up most of the input slurry.

Mandiri has constructed a processing plant located 23 km to the south of the current Mandiri deposit area. The plant incorporates the standard HM processing equipment in the form of dryers, gravity shaking tables, electro-static separators and electro-magnetic separators (**PTIM Plant**).

The current production capacity is in the order of 500 tpm.

Exhibit 2.12: Shaking Table at the PTIM Plant



Exhibit 2.13: Electrostatic and Electromagnetic Separators Installed at the PTIM Plant

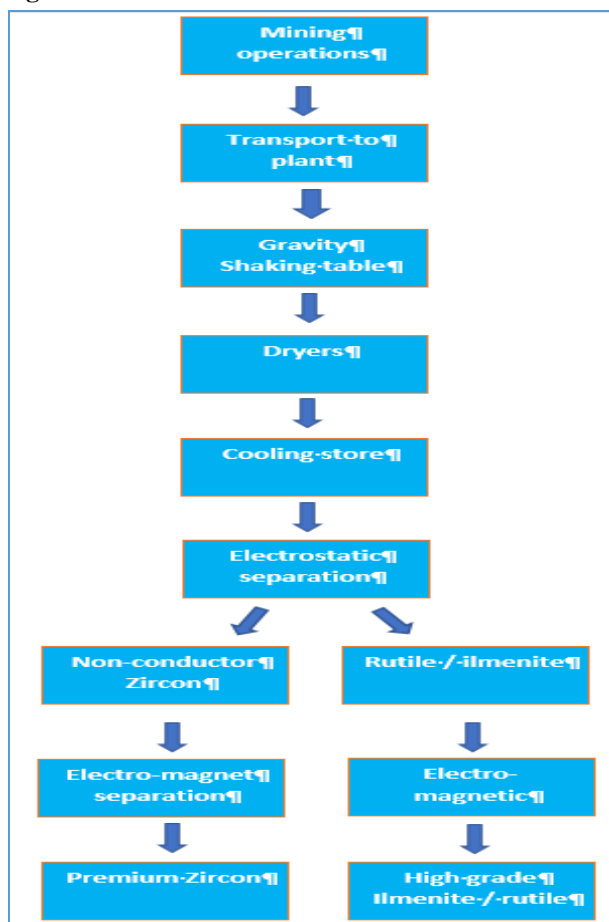


The separation process currently in operation at the PTIM processing plant is illustrated in Exhibit 2.14 and is as follows:

- HM feed material is passed over gravity shaking tables in a process that increases the zircon concentrate between 55% to 60%. At this stage, all waste sand is separated. Higher zircon concentrates can be achieved with the tables but at the cost of losing other mineral such as ilmenite and rutile.
- After the gravity shaking tables the concentrate is dried through a rotary dryer then cooled.
- The dried and cooled concentrate is then passed through an electro-static separation unit that separates metallic from non-metallic or non-conductive minerals. Zircon is separated from the ilmenite and rutile, and also precious metals such as gold and platinum.
- The final stage in the process is passing the zircon concentrate through an electro-magnet separation unit to produce a very high-grade zircon product of between 66% to 68% zircon. At this stage the TiO_2 and FeO_2 will be very low ($<0.1\%$) and the zircon product is classified as high-grade premium zircon sand.

The black heavy minerals separated from the zircon during the electro-static separation is then passed through the electro-magnet separation unit using different settings to separate ilmenite and rutile products. The rutile product will contain high grade TiO_2 , variable quantities of gold and platinum and small quantities of other non-magnetic minerals.

Exhibit 2.14: Schematic Processing Scheme at the PTIM Plant



2.6. Indonesia Background

The Republic of Indonesia is a country in Southeast Asia, between the Indian and Pacific oceans. It is the world's largest island country, with more than seventeen thousand islands, and at 1,904,569 square kilometres, the 14th largest by land area and the 7th largest in combined sea and land area. With over 261 million people, it is the world's 4th most populous country as well as the most populous Muslim-majority country.

Indonesia has abundant natural resources and continues to be a significant player in the global mining industry, with significant production of coal, copper, gold, tin, bauxite, and nickel. Indonesia also continues to be one of the world's largest exporters of thermal coal.

Indonesia is widely seen as a future economic giant. Its national GDP in 2017 was US\$1,015.14 billion, making it the third-largest economy in Asia and eighth-largest economy in the world by purchasing power parity. Consistently solid economic growth has some analysts arguing it could be the fifth-largest economy in the world by 2030 and fourth soon after. On a market exchange rate basis, Indonesia ranks 16th in the world but will likely enter the top ten by 2030.

Exhibit 2.15: Key Economic Indicators of Indonesia

Year	2012	2013	2014	2015	2016	2017	2018E
GDP (IDR trillion)	8,616	9,546	10,566	11,541	12,401	13,612	14,971
GDP (US\$ billion)	917.9	912.5	890.5	861.9	-	-	-
Real GDP Growth (%)	6.0	5.6	5.0	4.8	5.0	5.1	5.3
Annual Inflation (%)	3.7	8.1	8.4	3.4	3.2	4.5	4.4
FDI (US\$ billion)	21.2	23.3	25.1	19.7	15.8	-	-

Note: IDR denotes Indonesian Rupiah; FDI denotes Foreign Direct Investment

Source: International Monetary Fund, World Bank

According to the latest Article IV Consultation with Indonesia by the International Monetary Fund, the country accommodated well to changes in external environment through a mix of macroeconomic policies, “Bauran Kebijakan” and structural reforms. Growth has slowed but remained robust. A gradual fiscal consolidation has begun, and there were major progress on the financial stability framework.

Global mining companies consistently rank Indonesia highly in terms of its coal and mineral prospects, yet assessments of the mining policy regime and the investment climate have not been so positive. There has been limited investment in mining in recent years, and particularly limited investment in greenfield projects.

Indonesia’s long-standing framework for foreign investment was replaced under the 2009 Mining Law with a new area-based licensing system that is applicable to both foreign and domestic investors and incorporates tendering procedures for granting licences, with the involvement of local and provincial governments, as well as the central government.

Both the central and regional governments play vital roles in the mining industry, by setting national mining policies, standards, guidelines, and criteria, as well as deciding on mining authorisation procedures. Furthermore, the government is actively involved in development, control, evaluation, and conflict resolution in the sector.

3. Profile of the Company post Acquisition

This section contains a summary of the Company assuming the Acquisition is approved by Shareholders and fully implemented.

3.1. Overview of the Company post Acquisition

The Acquisition of Takmur by the Company will create the largest mineral sands company in Indonesia, with an exposure to capture large potential growth from this novel commodity from its mineral sands (primarily zircon) operations. The Company will have a stronger balance sheet and healthier financials with more short-term positive cash flow. The Company aims to be a significant mineral sands player within the next 3 years, and plans to achieve this through continuous production and expansion from the Mandiri Project, including construction of a 5.3km access road and establishment of mining operations.

The principal asset of the Company will be the Mandiri Project with its mining operations and operational processing plant. The Company will be renamed Pyx Resources Limited.

Given the extremely positive outlook of zircon supported by global fast-growing demand for high grade zircon combined with current significant supply constraints, focusing on mineral sands projects in Indonesia will bring significant potential to increase Shareholder value.

The combination of the Company’s capital, the skills and experience of the proposed Directors and management team, and the proposed projects will result in a company with a good platform for future development and growth.

3.2. Use of Funds

The Company's primary business objective is to operate a profitable and expansive mineral sands business. The Directors consider that the funds to be raised pursuant to the Public Offer, together with available cash and receivables, will provide sufficient capital to achieve the Company's primary business objectives.

The capital raised under the Public Offer will be allocated as follows:

	Use of Proceeds	Amount (AU\$)	Percentage (%)
1.	CAPEX		
	Heavy Mining Transport Equipment	1,000,000	7.1%
	Mining Field Unit	4,200,000	30.0%
	Separation Factory Equipment	1,000,000	7.1%
	Exploration Programs	800,000	5.7%
	Total CAPEX	7,000,000	50.0%
2.	Disposal costs, Acquisition, and Public Offer expenses including capital raising fees and expenses	4,000,000	28.6 %
3.	General working capital / Administrative Expenses¹		
	Account receivables	1,400,000	10.0%
	General and administrative costs	1,600,000	11.4%
	Total general working capital / Administrative Expenses	3,000,000	21.4%
	TOTAL	14,000,000	100%

¹ General working capital may include wages, payments to contractors, rent and outgoings, insurance, accounting, audit, legal and listing fees, other items of a general administrative nature and cash reserves which may be used in connection with any project such as investments and acquisitions, or in connection with any other item in the table above, as determined by the Board at the relevant time.

3.3. Capital Structure and Ownership

Should the Acquisition Resolutions be approved by Shareholders and following satisfaction of all other conditions to the Acquisition, including the Consolidation, the Company will issue 210,274,171 Shares (on a post-Consolidation basis) to the Vendors, as follows:

Vendor Name	No. of Takmur Shares held	% in Takmur	Transaction Shares (Post-Consolidation)	% held of SPB after the Transaction, Post-Consolidation and Capital Raising
Phoenix Fund Solutions Ltd.	1,100	44%	92,520,635	35.1%
Takmur SPC Ltd.	1,000	40%	84,109,669	31.9%
Sinowide International Limited	135	5.4%	11,354,805	4.3%
Unico Holdings Limited	135	5.4%	11,354,805	4.3%
Sino Ventures Limited	130	5.2%	10,934,257	4.2%
TOTAL	2,500	100%	210,274,171	79.8%

**The Vendors in the above table are unrelated to each other, except for being shareholders of Takmur.*

The effect of the Consolidation, the Public Offer and the issue of the Takmur Acquisition Shares is set out in the table below:

Current issued share capital (pre-Consolidation)	Current issued share capital (post-Consolidation)	Shares to be issued pursuant to the Acquisition	Public Offer *	Pro-forma total issued share capital**
365,694,211	18,284,711	210,274,171	35,000,000	263,558,882

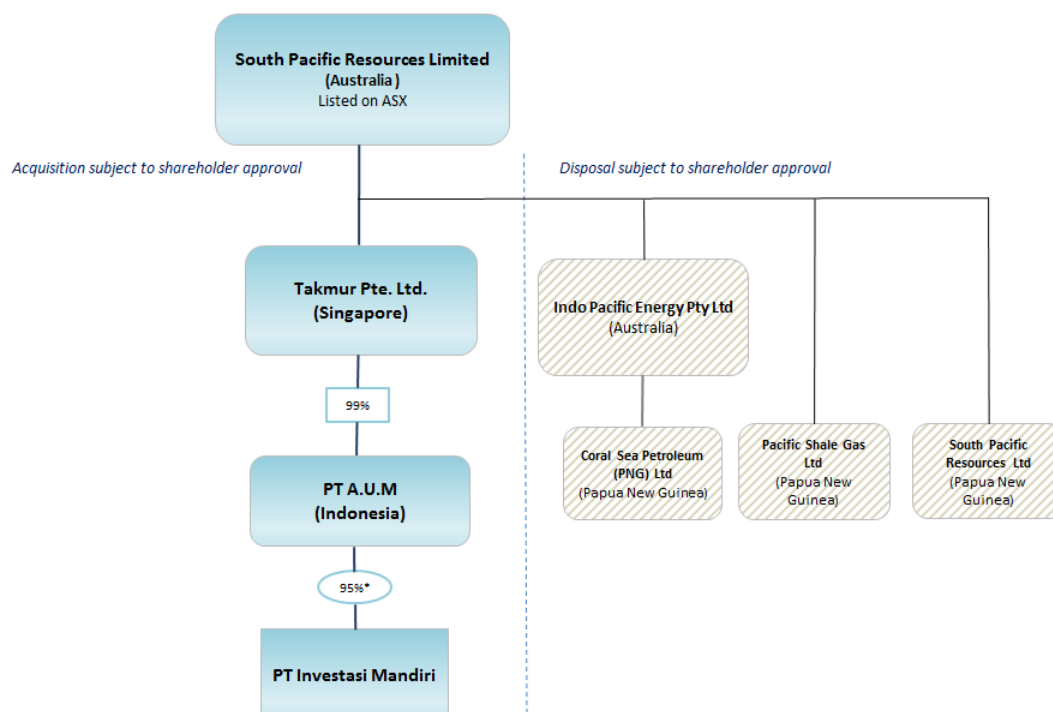
* This assumes that AU\$14,000,000 is raised through the Public Offer through the issue of 35,000,000 Shares at AU\$0.40 per Share (post-Consolidation). Following the Acquisition and Public Offer, the Vendors will in aggregate own 79.8% of the Company's issued Share capital.

The Company has 10,750,000 unlisted options (pre-Consolidation) on issue held by Tamarind Classic Resources Private Limited, with an expiry date of 22 February 2023 and an exercise price of \$AUD0.05. Post-Consolidation these options will total 537,500 unlisted options with an exercise price of \$AUD1.00.

** Shareholders should note the proposed issue of securities under the Stock Incentive Plan including the Performance Rights proposed to be issued to Mr Hasler.

3.4. Corporate Structure

The corporate structure of the Company after the completion of the Acquisition Resolutions is as follows:



All Subsidiaries are owned 100% unless otherwise noted

* Economic interests through operation and management agreement

The Company will control its mining operations in Indonesia via Exclusive Operation and Management agreements.

On 24 January 2019, PT Andary Usaha Makmur (**PT AUM**), a 99% owned subsidiary of Takmur, entered into an Exclusive Operation and Management Agreement with Mandiri the holder of IUP-OP zircon production and export license 16/DPE/IX/2010, under which PT AUM has committed to provide mining equipment, technical and management know-how to develop the Mandiri Project. Under the term of the agreement, Mandiri and its shareholders have delegated to PT AUM:

- the power to determine the financial and operational policy of Mandiri;
- the right to appoint the majority of Mandiri directors; and
- the right to receive 95% of Mandiri's net profit on an annual basis as a compensation for the services provided to Mandiri.

3.5. Board and Management Structure

On Completion of the Acquisition, the current Board of SPB, with the exception of Alvin Tan, will resign and be replaced by new Board members nominated by Takmur: Oliver Hasler, Bakhos Georges and Gary J. Artmont. Accordingly, on Completion of the Acquisition, the Board will comprise:

- (a) Mr. Oliver Hasler;
- (b) Mr. Bakhos Georges;
- (c) Mr. Alvin Tan; and
- (d) Mr Gary J. Artmont.

A profile of the Proposed Directors is provided in section 2.3.

3.5.1. Interests of Directors

As at the date of this Explanatory Statement, the Directors and the Proposed Directors and their associates have interests in the following securities in the Company:

Director	Shares Held		Options Held*	
	Directly	Indirectly	Directly	Indirectly
Mr. Oliver Hasler	-	-	-	-
Mr. Bhakos Georges	-	-	-	-
Mr. Domenic Martino	72,551,051	-	-	-
Mr. Joseph Goldberg	23,927,578	-	-	-
Mr. Alvin Tan	15,915,984	-	-	-
Mr Gary J. Artmont	-	-	-	-

* The Company has 10,750,000 unlisted options (pre-Consolidation) on issue held by Tamarind Classic Resources Private Limited, with an expiry date of 22 February 2023 and an exercise price of \$AUD0.05. Post-Consolidation these options will total 537,500 unlisted options with an exercise price of \$AUD1.00.

The Directors and the Proposed Directors and their associates will have interests in the following securities in the Company post the passing of the Acquisition Resolutions:

Director*	Shares Held		Options Held**		Performance Rights***
	Directly	Indirectly	Directly	Indirectly	
Mr. Oliver Hasler	-	-	-	-	17,675,376
Mr. Bhakos Georges	-	-	-	-	-
Mr. Domenic Martino	3,627,552	-	-	-	-
Mr. Joseph Goldberg	1,196,379	-	-	-	-
Mr. Alvin Tan	795,799	-	-	-	-
Mr Gary J. Artmont	-	-	-	-	-

* No Directors or Proposed Directors will participate in the Public Offer.

** The Company has 10,750,000 unlisted options (pre-Consolidation) on issue held by Tamarind Classic Resources Private Limited, with an expiry date of 22 February 2023 and an exercise price of \$AUD0.05. Post-Consolidation these options will total 537,500 unlisted options with an exercise price of \$AUD1.00.

*** The subject of Resolution 12 - the maximum number of shares that could be issued on achievement of the milestones associated with the Performance Rights to be issued under Resolution 12 is 21,110,195.

3.6. Financial Information of Company

This Section contains historical and pro forma financial information for the Company.

3.6.1. Historical and Pro-Forma Consolidated Statements of Financial Position of SPB

Set out below in this Section is:

- the historical Consolidated Statement of Financial Position of SPB as at 30 June 2019 (audited);
- the historical Consolidated Statement of Financial Position of Takmur as at 30 June 2019 (audited);
- the pro-forma Consolidated Statement of Financial Position of both SPB and Takmur (pro-forma consolidated) as at 30 June 2019 adjusted to reflect the Acquisition, the Disposal, the Public Offer and the issue of shares in SPB as a result of the passing of all resolutions at the Company's general meeting held on 20 August 2019.

The financial accounts of Takmur and its controlled entities are set out in Schedule 6.

The historical and pro-forma financial information has been prepared on the basis of the significant accounting policies adopted by the Company set out in Schedule 2 and should be read in conjunction with the accompanying notes set out in Section 3.6.2.

Pro-Forma Consolidated Statement of Financial Position

		SPB Consolidated	Takmur Consolidated	SPB post-Acquisition, Disposal and Public Offer
		Actual**	Actual	Pro-forma Consolidated
		Audited	Audited	Unaudited
	Notes	30 June 2019	30 June 2019	30 June 2019
		US\$	US\$	US\$
CURRENT ASSETS				
Cash and cash equivalents	1	3,258	210,750	7,145,861
Trade and other receivables		10,062	202,718	212,780
Inventories		-	472,202	472,202
Other current assets		-	120,594	120,594
TOTAL CURRENT ASSETS		13,320	1,006,264	7,951,438
NON CURRENT ASSETS				
Trade and other receivables		-	201,000	201,000
Intangible assets		-	7774	7,774
Rental bond		35,065	-	35,065
Plant and equipment		454	681,584	682,038
TOTAL NON CURRENT ASSETS		35,519	890,358	925,877
TOTAL ASSETS		48,840	1,896,622	8,877,315
CURRENT LIABILITIES				
Trade and other payables	2	1,646,446	600,874	824,062
Borrowings	3	640,612	-	62,503
Other current liabilities		-	256,420	256,420
TOTAL CURRENT LIABILITIES		2,287,059	857,294	1,142,984
NON CURRENT LIABILITIES		-	42,557	42,557
TOTAL LIABILITIES		2,287,059	899,951	1,185,541
NET ASSETS / (LIABILITIES)		(2,238,219)	996,771	7,691,774
EQUITY				
Issued capital	4	6,377,443	1,178	14,093,485
Reserves		399,736	-	-
Foreign currency translation reserve		38,948	2,636	2,636
Accumulated earnings/(losses)	5	(9,054,345)	231,195	(7,166,109)
Non-controlling interest		-	761,762	761,762
TOTAL EQUITY		(2,238,219)	996,771	7,691,774

**The accounts of SPB have been translated from AU\$ to US\$ (refer to accounting policy note in Section 3.6.2).

Notes to the Pro-Forma Consolidated Statement of Financial Position

	SPB Consolidated	Takmur Consolidated	SPB post-Acquisition, Disposal and Public Offer
	Actual**	Actual	Pro-forma Consolidated
	Audited	Audited	Unaudited
	30 June 2019	30 June 2019	30 June 2019
	US\$	US\$	US\$
Note 1: Cash and Cash Equivalents			
Cash and cash equivalents	3,258	210,750	214,008
Sale of Papua New Guinea assets	-	-	690
Issue of Shares under Public Offer #	-	-	9,660,000
Share offer costs	-	-	(840,700)
Transaction costs	-	-	(1,888,137)
	3,258	210,750	7,145,861
#This assumes that A\$14,000,000 (US\$9,660,000) is raised through the Public Offer			
Note 2: Trade and Other Payables			
Trade and other payables	1,646,446	600,874	2,247,320
Conversion of trade creditors to equity	-	-	(1,423,258)
	1,646,446	600,874	824,062
Note 3: Borrowings			
Borrowings	640,612	-	640,612
Conversion of convertible note to equity	-	-	(578,109)
	640,612	-	62,503
Note 4: Issued Capital			
SPB and Takmur issued capital	6,377,443	1,178	6,378,621
Deemed value of shares issued on the conversion of trade creditors to equity			1,897,678
Deemed value of shares issued on the conversion of convertible note to equity			793,527
Proposed acquisition (post-consolidation):			
Elimination of SPB issued capital			(9,068,648)
18,284,711 ordinary shares at A\$0.40 (US\$0.276) pursuant to the Acquisition *	-	-	5,046,580
Proposed Public Offer (post-consolidation):			
Issue of 35,000,000 shares at A\$0.40 (US\$0.276) per ordinary share under Public Offer (net of costs)	-	-	9,660,000
Offer costs attributed to issued capital			(614,273)
			14,093,485
Note 5: Accumulated earnings/(losses)			
Accumulated earnings/(losses)	(9,054,345)	231,195	(8,823,150)
Loss on conversion of debt to equity			(689,837)
Elimination of SPB pre-Acquisition losses			9,744,182
Gain on sale of Papua New Guinea assets	-	-	690
Transaction Loss	-	-	(5,283,430)
Transaction Costs	-	-	(1,524,700)
Administrative, Accounting and legal due diligence			(363,437)
Offer costs attributed to accumulated losses	-	-	(226,427)
			(7,166,109)

*The acquisition has been accounted for using the principles of reverse acquisition accounting under AASB 3 – Business Combinations since the substance of the transaction is that the existing shareholders of Takmur effectively gain control of SPB. Essentially the price paid for the acquisition of SPB by Takmur is the shares currently held by SPB shareholders – post consolidation (18,284,711) by the re-listing price of A\$0.40 (or US\$0.276), being A\$7,313,884 (or US\$5,046,580).

**The accounts of SPB have been translated from AU\$ to US\$ (refer to accounting policy note in Section 3.6.2).

3.6.2. Summary of Significant Accounting Policies

The historical financial information of SPB has been prepared in accordance with Australian Accounting Standards (AASBs) (including Australian Interpretations) adopted by the Australian Accounting Standards Board (AASB) and the Corporations Act 2001. The financial information complies with International Financial Reporting Standards (IFRSs) and interpretations adopted by the International Accounting Standards Board. The Takmur financial information and pro-forma financial information have been prepared in accordance with IFRSs and IFRIC interpretations issued by the IFRS Interpretations Committee.

The financial information is presented in US dollars. The functional currency of each entity within the pro-forma consolidated group is measured using the currency of the primary economic environment in which that entity operates. The pro-forma financial information is presented in United States dollars (“US\$”) which is the functional currency of the operating entity. The presentation currency for the consolidated group will be US\$, should the Transaction complete. The financial information of SPB has been translated to US\$ as follows:

- Assets and liabilities are translated at the rate of exchange in effect at the reporting date;
- Issued Capital and Reserves are translated at historical rates;
- Accumulated losses are translated at an average rate for the year they were incurred; and
- Exchange rate differences arising on the translation are taken to the Foreign Currency Translation Reserve in the consolidated statement of financial position.

The financial information has been prepared on an accruals basis using historical costs and does not take into account changing money values or, except where stated, current valuations of non-current assets. Cost is based on the fair values of the consideration given in exchange for assets. The accounting policies adopted have been consistently applied.

The significant accounting policies set out in Schedule 2 to this Explanatory Statement have been applied in the preparation and presentation of the financial information presented in this Section.

It is highly recommended that the financial information be read in conjunction with the Company’s published Financial Statements and any public announcements made by the Company in accordance with its continuous disclosure requirements arising under the ASX Listing Rules.

3.7. Risk Factors

Shareholders should be aware that if the change in nature and scale of the Company’s activities and Transaction proceeds, the Company will become a global producer of premium zircon, engaging in mining, processing and exploration activities focused on mineral sands deposits in Indonesia and other regions, where appropriate which is subject to various risk factors. Based on the information available, a non-exhaustive list of risk factors are as follows:

3.7.1. General

Shareholders should be aware that if the Acquisition proceeds, the Company will be changing the scale and nature of its activities to that of a mineral sands company which is subject to various risk factors including the risk that investors may lose some or all of their investment. Based on the information available, a non-exhaustive list of risk factors are as follows.

Re-quotations of Shares on ASX

Shareholders should be aware that the re-admission of the Company to the ASX is at the discretion of ASX and there can be no guarantee that the ASX will approve the re-admission on conditions that are able to be satisfied by the Company, or at all.

Should this occur the Shares will not be able to be traded on the ASX until such time as those conditions can be met, if at all. Shareholders may be prevented from trading Shares should the Company be suspended until such time as it does re-comply with the ASX Listing Rules.

Public Offer does not reach \$14,000,000

\$14,000,000 is the only subscription amount under the Public Offer and as such if the Company does not raise \$14,000,000 under its Prospectus the Acquisition will not proceed. In the event the Company does not raise \$14,000,000 any application money will be returned to applicants in accordance with the provisions of the Corporations Act.

General economic conditions

Changes in the general economic climate in which the Company operates may adversely affect the financial performance of the Company. Factors such as inflation, currency fluctuations, interest rates, supply and demand of capital and industrial disruption have an impact on business costs, commodity prices and stock market prices. The Company's operating costs, possible future revenues and future profitability can be affected by these factors, which are beyond the control of the Company. The price of commodities and level of activity within the mining industry will also be of particular relevance to the Company.

Legislative Change

Changes in government regulations and policies may adversely affect the financial performance or the current and proposed operations generally of the Company. The Company is not aware of any current or proposed material changes in relevant regulations or policy.

Unforeseen Expenses

While the Company is not aware of any expenses that may need to be incurred that have not been taken into account, if such expenses were subsequently incurred, the expenditure proposals of the Company may be adversely affected.

Share Market Conditions

Share market conditions may affect the value of the Company's quoted securities regardless of the Company's operating performance. Share market conditions are affected by many factors such as, general economic outlook, interest rates and inflation rates, currency fluctuations, changes in investor sentiment toward particular market sectors, the demand for, and supply of, capital and terrorism or other hostilities.

Reliance on Key Personnel

The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel. There can be no assurance given that there will be no detrimental impact on the Company if one or more of these employees cease their employment.

Share Liquidity risk

The Company currently has 365,694,211 Shares on issue (on a pre-Consolidation basis), if the Resolutions are approved at the General Meeting, the Company's Shares will be consolidated on a one for twenty basis into approximately 18,284,711 Shares (subject to rounding of fractional entitlements). On Completion, the Company will issue a further 280,687,262 Shares, comprising 210,274,171 Acquisition Shares and 35,000,000 Shares pursuant to the Public Offer.

A portion of the shares on issue will be subject to escrow restrictions in accordance with Chapter 9 of the

ASX. This could be considered an increased liquidity risk as a large portion of issued capital may not be able to be tradable freely for a period of time. Conversely, if the Company is successful in achieving some or all of its objectives, this relative lack of liquidity may lead to volatility in the price of the Company's securities.

Future Capital Needs

Further funding will be required by the Company to support its ongoing activities and operations. There can be no assurance that funding will be available on satisfactory terms or at all. Any inability to obtain finance will adversely affect the business and financial condition of the Company and its performance. If additional funds are raised through the issuance of new equity or equity-linked securities of the Company other than on a pro rata basis to existing shareholders, the percentage ownership of shareholders may be reduced. Shareholders may experience subsequent dilution. There can be no guarantee that any capital raisings will be successful.

It is the view of the Proposed Directors that completion of these activities may lead to the practical commercialisation of the projects of the Company.

Further funding may be required by the Company in the event costs exceed the Company's estimates or revenues do not meet estimates, to support its ongoing activities and operations, and to take advantage of opportunities for acquisitions, joint ventures or other business and technology opportunities, and to meet any unanticipated liabilities or expenses which the Company may incur.

Speculative Investment

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Enlarged Company and the value of the Company's securities.

3.7.2. Specific Risks Related to the Company's foreign Operations

The Company's operations initially will predominantly be in the Republic of Indonesia whose economies are subject to many global and internal forces beyond the control of the Company. The Company and its operations may be impacted by changes in the general economic and political climate in the jurisdictions in which the Company operates and on a global basis that could impact on economic growth, the reformation of government structure or industry, commodity prices, interest rates, the rate of inflation, taxation and tariff laws and domestic security which may affect the value and viability of any mineral sands activity conducted by the Company.

Operating in foreign countries has inherent risks which may impact adversely on the financial position, financial performance, cash flows, growth prospects, ability to pay dividends and the share price of the Company.

Changes in government policies

Industry is subject to the policies which are implemented by the relevant governments from time to time. These policies may have a material impact on the business of the Company. These governments may, for instance, withdraw subsidies or forms of preferential treatment such as tax benefits or favourable financing arrangements.

Foreign Investment Regulation in Indonesia

The Indonesian regulatory regime in relation to foreign investments imposes certain restrictions on the acquisition by foreign investors of direct or indirect interests in Indonesian companies, including offshore loan regulations and repatriation of funds. Changes in the regulatory regime could consequently have a material adverse effect on the Company's business and financial condition.

Economic considerations

It is unclear how future economic reforms and macroeconomic measures to be adopted by governments will

affect the development of a country's economy. Further, there can be no assurance that such measures will be applied consistently and effectively or that the Company will be subject to such reforms. The business of the Company may be adversely affected by any reform.

Investment in Emerging Markets

The Indonesian economy is vulnerable to market downturns and economic slowdowns elsewhere in the world, and, generally, investing in emerging markets such as Indonesia involves greater risk than investing in more developed markets, including in some cases significant legal, economic and political risks. Investors should also note that emerging markets such as Indonesia are subject to rapid change. Global financial or economic crises in any large emerging market country tend to adversely affect prices in equity markets of most or all emerging market countries as investors move their money to more stable, developed markets.

As has happened in the past, financial problems or an increase in the perceived risks associated with investing in emerging economies could dampen foreign investment in Indonesia and adversely affect the economy. In addition, during such times, businesses that operate in emerging markets can face severe liquidity constraints as foreign funding sources are withdrawn.

Accordingly, investors should exercise particular care in evaluating the risks involved and must decide for themselves whether, in light of those risks, their investment is appropriate. Potential investors are urged to consult with their own legal and financial advisors before making an investment in the Company.

Expropriation, Nationalism and Commercial Disputes

As the Company's assets are located primarily in Indonesia which is an emerging market country, its assets and income are subject to certain political, economic and other uncertainties, including the risk of expropriation, nationalisation and commercial disputes.

Indonesia has been seeking to develop a value added downstream sector including the requirement for domestic processing and refining, bans on the export of unprocessed ores, use of local content, domestic market obligations and staged divestment to local parties. These laws and regulations may result in sub-optimal outcomes for the Company and the Mandiri Project, and there is the possibility that the Indonesian legislation and regulations currently applicable may become more nationalistic to the detriment of the Company.

While legislation exists in Indonesia that would require the payment of compensatory amounts in the event of an expropriation or nationalisation of assets, there is no assurance that such protections could be enforced and the amount of any such compensation may be lower than the price for which the expropriated asset could be sold in a free-market sale or the value of the asset as part of an ongoing business. Any expropriation or nationalisation of the Company's assets in Indonesia may have a material adverse effect on the Company's financial position and results of operations.

Commercial disputes arise in Indonesia as they do in most jurisdictions. Foreign owned Indonesian companies may face local commercial pressures and legal challenges to asset ownership and value which are time consuming, costly and disrupt harmonious business relationships.

While legislation exists in Indonesia to protect commercial rights, there is no assurance that such protections could be enforced and commercial settlements may be lower than the price for which disputed assets could be sold in a free-market sale or the value of the asset as part of an ongoing business. Any commercial disputes regarding the Company's assets in Indonesia may have a material adverse effect on the Company's financial position and results of operations.

Legal considerations

Statutes, regulations and government policies are subject to change from time to time, as is the interpretations of statutes and regulations and the application of policy. Such uncertainties may affect the Company's operations and accordingly, its profitability.

Foreign investment requirements

Many governments have foreign exchange controls which need to be considered as far as repatriation of

funds to Australia and elsewhere is concerned. These controls may have an adverse effect on the financial position, financial performance, cash flows, growth prospects, ability to pay dividends and the share price of the Company.

Challenges to the ownership or nature of titles and other rights

The Company may potentially be exposed to challenges to the ownership or nature of titles and other rights by its partners, government authorities or third parties.

Devaluation or appreciation of currencies

The external value of the various currencies is affected by changes in policies of the government and to international economic and political developments. In addition, financial markets in Indonesia have in the past experienced severe volatility. As a result, the Indonesia currency (IDR) have been subject to significant devaluation from time to time. Movements in the value of currencies could have an adverse effect on the Company's operations and accordingly its profitability.

Timing considerations

It may take many years to get from a discovery to production of a mineral sands asset. As such, there is a risk that the initial investment involved in discovery will not get to the exploitation stage. Such uncertainties as to timing may affect the Company's operations and accordingly its profitability.

Indonesia Legal and Regulatory Framework and Taxation Risks

Indonesian tax laws, regulations and court practice are subject to frequent change, varying interpretations and inconsistent and selective enforcement. Tax audits or inspections may result in additional costs to the Company if the relevant tax authorities conclude that the Company did not satisfy its tax obligations in any given year.

Such audits or inspections may also impose additional burdens on the Company by diverting the attention of management resources. The outcome of these audits or inspections could have a material adverse effect on the Company's business, results of operations, financial condition and prospects.

If tax authorities and/or courts adopt a different interpretation of various tax laws and regulations from that followed by the Company and its legal and tax advisors, the Company may have to pay taxes of a different type and quantum anticipated. This could have a material adverse effect on the Company's business, results of operations, financial condition and prospects.

Indonesia also imposes restrictions in export of raw minerals. A minimum 65.5% grade of zircon is required to meet export requirements. Given that the legal and regulatory framework for mineral industry is subject to major changes in the past in Indonesia, there are risks for investors where it is possible that the future change in regulation could bring material challenge to the Company, and additional taxes imposed or found to be in conflict with other local laws and regulations.

Operational Risk

The Republic of Indonesia in which the Company will, following the Acquisition, conduct operations in is a developing country and may be subject to instability (political, economic, or otherwise).

Risks include, among other matters:

- Economic instability;
- changes in mineral sands exportation and transportation regulations;
- imposition of additional obligations/restriction on foreign investors;
- local currency devaluations; and
- nationalisation or expropriation of the Company's assets.

As such, investors are advised to be aware of the risks of investing in the Company given its operations in these areas.

Physical Infrastructure

Whilst Indonesia continues to invest in improving its physical infrastructure, certain elements remain in poor condition, which may lead to interruptions in effective financial and economic activity. Particularly affected are parts of the rail and road networks, power-generation and transmission networks, communication systems and building stock. This poor physical infrastructure potentially disrupts the transportation of goods and supplies as well as communications and adds costs to doing business, which could have a material adverse effect on the Company's business, results of operations, financial condition and prospects.

Corruption in Indonesia

The local and international press has reported that high levels of corruption exist in Indonesia. The demands of corrupt officials or potential future claims that the Company has been involved in official corruption could result in negative publicity or disrupt its ability to conduct its business effectively, which could have a material adverse effect on the Company's business, results of operations, financial condition and prospects.

International Operations (Generally)

International operations are subject to a wide variety of uncertainties: including (but not limited to) political, economic and other risks which may include: terrorism, revolution, border disputes, expropriation, renegotiations or modifications of existing contracts, import, export and transportation regulations and tariffs, taxation policies, including royalty and tax increases and retroactive tax claims, exchange controls, limits on allowable levels of production, currency fluctuations, labour disputes and other uncertainties arising out of foreign government sovereignty over the Company's international operations.

3.7.3. Specific Risks Related to the Industry and Operations

Exploration and Development Risks

The business of mineral sands exploration, project development and production, by its nature, contains elements of significant risk with no guarantee of success. Notwithstanding the experience, knowledge and careful evaluation a company brings to an exploration project there is no assurance that economically viable mineral sands resources will be identified. Even if identified, other factors such as technical difficulties, geological conditions, adverse changes in government policy or legislation or lack of access to sufficient funding may mean that the resource is not economically recoverable or may otherwise preclude the Company from successfully exploiting the resource.

Ultimate and continuous success of exploration and development activities is dependent on many factors such as:

- the discovery and/or Acquisition of economically recoverable reserves;
- access to adequate capital for project development;
- design and construction of efficient development and production infrastructure within capital expenditure budgets;
- securing and maintaining title to interests;
- obtaining consents and approvals necessary for the conduct of mineral sands exploration, development and production;
- securing suitable plant and equipment, particularly given equipment utilisation rates are high in the current period of global exploration/production activity, hence competition for such equipment may also be high; and
- access to competent operational management and prudent financial administration, including the availability and reliability of appropriately skilled and experienced employees, contractors and

consultants.

Whether or not income will result from projects undergoing exploration and development programmes depends on successful exploration and establishment of production facilities. Factors including costs, actual mineral sands resources, grade, transportation and reliability and commodity prices affect successful project development and operations.

Exploration and production activities carry risk as such activities may be curtailed, delayed or cancelled as a result of weather conditions, mechanical difficulties, shortages or delays in the delivery of drilling rigs or other equipment.

Mineral sands exploration, development and production operations are subject to all the risks and hazards typically associated with such operations, including hazards such as fire, explosions, industrial disputes, cave-ins, unexpected shortages or increases in the cost of consumables, spare parts, plant and equipment, mechanical failure and breakdown, blow outs, environmental hazards such as accidental sour gas releases and spills, ruptures, discharge of toxic gases or geological uncertainty. The occurrence of any of these risks could result in legal proceedings against the Company and substantial losses due to injury or loss of life, damage to or destruction of property, natural resources or equipment, pollution or other environmental damage, clean up responsibilities, regulatory investigation, and penalties or suspension of operations. Damage occurring to third parties as a result of such risks may give rise to claims against the Company.

There is no assurance that any exploration on current or future interests will result in the discovery of an economic deposit of mineral sands. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically developed.

In addition, the Company will be subject to multi- jurisdictional compliance with governmental regulations in relation to licence conditions, the environment and operational conduct.

Exploration Costs

Exploration expenditure estimates are based on certain assumptions with respect to the method and timing of exploration. By their nature, these estimates and assumptions are subject to significant uncertainties and accordingly, the actual costs may materially differ from these estimates and assumptions. Accordingly, no assurance can be given that the cost estimates and the underlying assumptions will be realised in practice, which may materially and adversely affect the Company's viability.

Operational risk

The Company and operations may be affected by a range of factors. These include failure to achieve predicted grade in exploration, mining and processing, technical difficulties encountered in commissioning and operating plant and equipment, mechanical failure, metallurgical problems which affect extraction rates and costs, adverse weather conditions, industrial and environmental accidents, industrial disputes, unexpected shortages or increase in the costs of consumables, spare parts, plant and equipment.

Unforeseen geological, geotechnical or operational difficulties could also cause a loss of revenue due to lower production than expected, higher operating and maintenance costs and/ or ongoing unplanned capital expenditure to meet production targets. Any such geological conditions may adversely affect the Company's financial performance.

A failure to obtain access (whether under a contractual arrangement or otherwise) to an adequate supply of capital equipment or consumables for use in the Company's operations could disrupt operations at the Mandiri Project, reduce production rates and increase costs.

Mineral Sands Products Price Volatility

If the Company achieves success leading to production, the revenue it will derive through the sale of commodities exposes the potential income of the Company to commodity price and exchange rate risks. Commodity prices fluctuate and are affected by many factors beyond the control of the Company.

The demand for, and price of mineral sands is highly dependent on a variety of factors, including international supply and demand, the level of consumer product demand, weather conditions, actions taken by

governments and international cartels, and global economic and political developments.

Fluctuations in mineral sands prices and, in particular, a material decline in the price of zircon may have a material adverse effect on the Company's business, financial condition and results of operations.

Investors should note that the prices in the current mineral sands market are regarded as being low, with little obvious short term indication of recovery. Takmur is not involved in any high operating cost projects such as offshore developments.

Investors should be aware that further decreases in zircon price levels may ultimately affect the viability of exploration activities within the Company's focus areas, which could result in a negative effect on the Company's future cash flow and the viability of potential future projects, which in turn may affect the value of the Company's Shares.

Joint Venture Parties, Contractors and Contractual Disputes

With respect to this issue, the Directors are unable to predict the risk of:

- financial failure or default by a participant in any joint venture to which the Enlarged Company may become a party; or
- insolvency or other managerial failure by any of the operators and contractors used by the Enlarged Company in its exploration activities; or
- insolvency or other managerial failure by any of the other service providers used by the Enlarged Company or its operators for any activity; or
- title and payment obligations.

Under the relevant joint venture agreements and certain other contractual agreements to which the Company may in the future become party, the Company is or may become subject to payment and other obligations. If any contractual obligations are not complied with when due, in addition to any other remedies which may be available to other parties, this could result in dilution or forfeiture of interests held by the Company.

Marketability of Production

The marketability and commerciality of mineral sands to be acquired and/or produced by the Company is subject to several factors which include (but are not limited to): reservoir characteristics, market fluctuations, the proximity and capacity transportation, the market price of zircon and governmental regulations. Restrictions on the ability of the Company to market the Company's production may have a material adverse effect on the Company's revenues and financial position.

Substitution of Zircon

The Company notes the existence and the development of alternative materials acting as substitution products for zircon.

If the costs and commercial prices for such alternative materials fall this may have a significant effect upon the Company's overall financial performance and ability to perform as a company operating in the mineral sands industry. The Company can give no guarantee that the Company's products or prospects will remain competitive in the future due to changes in the marketplace.

Local Community and Landowner Risk

The Enlarged Company may be required to pay compensation to landowners, local authorities, traditional land users and others who have an interest in the area covered by the licences. The Enlarged Company's ability to resolve compensation issues and compensation costs involved will have an impact on the future success and financial performance of the Enlarged Company's mineral sands operations. If the Enlarged Entity is unable to resolve such compensation claims on economic terms, this could have a materially adverse effect on the business, results or operations and financial condition of the Enlarged Company.

Foreign Exchange Risk

The operations of the Company will initially be in Indonesia and the costs of and revenues from operations will be in Indonesian Rupiah as well as the United States Dollar. The Company may deal in other currencies from time-to-time, as appropriate. As the Company's financial reports will be presented in US dollars, the Company will be exposed to the volatility and fluctuations of the exchange rate between local currencies, the US dollar and the Australian dollar.

Global currencies are affected by a number of factors that are beyond the control of the Company. These factors include economic conditions in the relevant country and elsewhere and the outlook for interest rates, inflation and other economic factors. These factors may have a positive or negative effect on the Company's exploration, project development and production plans and activities together with the ability to fund those plans and activities.

The Board may consider whether to manage currency fluctuation risk by hedging however, there can be no assurance that the Company will hedge its exchange rate exposure, nor that it will be able to hedge such exposure on acceptable terms in the future or that any exchange rate hedging conducted by the Company will be effective or will not result in an adverse financial impact arising from the inability to benefit from a favourable movement in exchange rates.

Reserves and Resource Estimates

Reserve and resource estimates are expressions of judgement based on knowledge, experience and industry practice. Estimates which were valid when originally calculated may alter significantly when new information or techniques become available. In addition, by their very nature, resource and reserve estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate. As further information becomes available through additional drilling and analysis the estimates are likely to change. This may result in alterations to development and production plans which may in turn, adversely affect the Company and its operations.

Environmental Risks

The Company's activities will be subject to the environmental risks inherent in the mineral sands industry. The Company will be subject to Indonesian environmental laws and regulations in connection with operations it may pursue in the mineral sands industry. Environmental compliance is an ongoing liability of the Company. The Company intends to conduct its activities in an environmentally responsible manner and in accordance with all applicable laws. However, the Company may be the subject of accidents or unforeseen circumstances that could subject the Company to extensive liability.

The Company may also become liable for environmental damage caused by previous owners of any subsoil licence areas the Company will hold. As a result, substantial liabilities to third parties or governmental entities may be incurred, the payment of which could reduce or eliminate funds available for Transactions, exploration and development or cause the Enlarged Company to suffer losses.

Further, the Company may require approval from the relevant authorities before it can undertake activities that are likely to impact the environment. Failure to obtain such approvals will prevent the Company from undertaking its desired activities.

These and other impacts that the Company's operations may have on the environment, as well as exposures to hazardous substances or wastes associated with the Company's operations and environmental conditions at the Company's properties, could result in costs and liabilities that would have a material adverse impact on the financial position and operating results of the Company.

A violation of environmental laws relating to a mine or other operating facilities, or failure to comply with the instructions of the relevant environmental authorities, could lead to, amongst other things, a temporary shutdown of all or a portion of the mine or relevant facility, a loss of the right to operate the relevant facility, the imposition of costly compliance procedures and fines, or serious reputational damage to the Company.

Environmental legislation and permitting requirements and the manner in which these are enforced are likely to evolve in a manner which will increase standards and enforcement criteria, as well as increase fines and penalties for non-compliance.

The Directors are unable to predict the extent and effect of additional environmental laws and regulations that may be adopted in the future, and if environmental standards evolve in such a manner, this could have a material adverse effect on the Company's business, results of operations, financial condition and prospects.

Retention of Key Business Relationships

The Enlarged Company may rely on strategic relationships with other entities such as joint venture and farm-in parties and also on good relationships with regulatory and governmental departments. It will also rely upon third parties to provide essential contracting services.

While the Company has no reason to believe otherwise, there can be no assurance that the Company's existing relationships will continue to be maintained or that new ones will be successfully formed and the Company could be adversely affected by changes to such relationships or difficulties in forming new ones. Any circumstance, which causes the early termination or non-renewal of one or more of these key business alliances or contracts, could adversely impact the Company, its business, operating results and prospects.

Competition

The Company will compete with other companies, including major mineral sands companies. Some of these companies have greater financial and other resources than the Company and, as a result, may be in a better position to compete for future business opportunities. In addition, new entrants may commence mineral sands exploration and development in areas where the Company operates. There can be no assurance that the Company can compete effectively with these companies. Competition may also be presented by alternative energy sources.

Management of Growth

The Company may be subject to growth-related risks including capacity constraints and pressure on its internal systems and controls. The ability of the Company to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. The inability of the Company to deal with this growth could have a material adverse effect on the Company's business, financial condition, results of operations and prospects.

Insurance

Insurance against all risks associated with mineral sands exploration is not always available or affordable. The Company will maintain insurance where it is considered appropriate for its needs, however it will not be insured against all risks either because appropriate cover is not available or because the Directors consider the required premiums to be excessive having regard to the benefits that would accrue.

Uninsurable Risks

Exploration, development and production operations on mineral sands properties involve numerous risks, including unexpected or unusual geological operating conditions, floods, earthquakes and other environmental occurrences, and political and social instability. It is not always possible to obtain insurance against all such risks and the Company may decide not to insure against certain risks because of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate any further profitability and result in increasing costs and a decline in the value of the securities of the Company. Initially, the Company will not maintain insurance against operational, political or environmental risks.

Taxation Liability Risk

The tax environments of Indonesia are subject to continuous development and can be subject to retroactive change, ambiguity and inconsistent application, interpretation and enforcement which could result in unfavourable changes to the Company's tax position. Non-compliance with local laws and regulations as interpreted by local authorities could lead to the assessment of additional taxes, penalties and interest.

In accordance with the directors' ongoing fiduciary duties to the shareholders of the Company, the Company will structure a number of its operations (financial, professional services, or otherwise) through some low-tax jurisdictions (please refer to the Takmur structure chart contained within this Prospectus). Given the current governmental and political focus upon multinational corporations acting both inside and outside of Australia, the Company, following the Transaction, may be subject to heightened regulatory risk from tax authorities and this may possibly represent a financial risk to Investors receiving Shares under the Offers.

4. Regulatory Information

This section contains information specifically required by the Corporations Act, the ASX Listing Rules or other relevant laws in relation to each of the Resolutions proposed.

1. Resolution 1 - Disposal of main undertaking

1.1 General

Resolution 1 relates to the approval under ASX Listing Rule 11.2 to enable the Company to dispose of its main undertaking, being its interest in 100% of the shares in Indo Pacific Energy Pty Ltd (**IPEL**) (including its wholly owned subsidiary Coral Sea Petroleum (PNG) Limited), South Pacific Resources Pty Ltd (PNG) and Pacific Shale Gas Limited (collectively, the **Subsidiaries**) for a total consideration of AU\$1,000. Listing Rule 11.2 provides that if a company intends to dispose of its main undertaking, it can only do so with the approval of its shareholders.

The Company is proposing to dispose of its shares in the Subsidiaries to Ana and Bella Pty Ltd (ACN 626 535 706) (**A&B**), which is not a related party of the Company.

To ensure ongoing suitability for listing on the ASX, following the proposed disposal of the Company's main undertaking, the Company also seeks Shareholders approval for its change in nature and scale of activities, and will seek to re-comply with the requirements in Chapters 1 and 2 of the Listing Rules following the passing of the Acquisition Resolutions.

Contemporaneous with the Acquisition, the Company now seeks to formalise and effectuate a full disposal of its shareholdings in its Subsidiaries and their assets to A&B (**Disposal**) on the terms of the Share Sale Agreement, summarised below.

As A&B is not a related party of the Company, Shareholder approval for the Disposal is not required for the purposes of Listing Rule 10.1.

1.2 Advantages and Disadvantages of the Disposal

The Directors believes that there are the following advantages to Shareholders approving the Disposal:

- (a) the Company will be able to fulfil the conditions of the Share Purchase Agreement with Takmur and complete the proposed Acquisition;
- (b) the Company will no longer be subject to prospective liabilities that have arisen due to the loss of control of the Subsidiaries;
- (c) the Company's business will be re-positioned on high quality mineral sands assets that are in production and cash flow positive, in an industry which presents significant upside potential and compelling investing opportunities without being hindered by its legacy oil and gas assets;

- (d) the Disposal will facilitate the Company's ongoing strategy of restructuring its balance sheet to ensure its ongoing financial viability; and
- (e) the Company can focus its efforts on the ongoing production and development of the Mandiri Project.

The potential disadvantages to Shareholders approving this resolution are:

- (a) the Company will no longer have any interest in the Subsidiaries;
- (b) the Company will be changing the scale of its activities by a significant extent through the Disposal, which may not be consistent with the investment objectives of all Shareholders; and
- (c) the Company will lose a potential income earning asset.

1.3 Share Sale Agreement

On 6 August 2019, the Company, the Subsidiaries and A&B entered into the Share Sale Agreement. The Share Sale Agreement provides that the Company will transfer its 100% interest in the Subsidiaries, free from security interests, to A&B subject to receiving shareholder approval.

The material terms of the Share Sale Agreement are as follows:

- (a) the Share Sale Agreement is conditional upon shareholder approval of the Disposal, close of the Public Offer and approval of the Acquisition;
- (b) a purchase price of AUD\$1,000.00 is payable to the Company for the shares in the Subsidiaries;
- (c) the Company gives standard warranties as to the status of the Subsidiaries.

The Share Sale Agreement otherwise contains terms and conditions typical for an agreement of this nature.

1.4 Impact on the Company

The Disposal will have no impact on the Company's Board or senior management. However, approval of the Disposal will enable the Acquisition to proceed, and changes to the Company's Board will be required as part of the terms of the Acquisition.

As a result of the Disposal, a pro forma adjustment is required for the Company accounts as at 30 June 2019. The pro-forma adjustment is reflected in the pro-forma statement of financial position of the Company set out in section 3.6 of this notice of meeting.

If shareholder approval is not given for this resolution, the Company will not proceed with the Acquisition.

1.5 Directors Recommendation

The Directors are of the opinion that the Disposal is in the best interests of the Company and unanimously recommend that Shareholders vote in favour of Resolution 1.

2. Resolution 2 – Approval of Change of Activities

The Company has entered into a Share Purchase Agreement with Takmur pursuant to which the Company has agreed to acquire all the issued capital of Takmur (**Acquisition**). Details of the Acquisition and the operations of Takmur, and proposed changes to the structure and operations of the Company are set out at sections 1 and 2 of the Explanatory Statement.

Resolution 2 seeks approval from Shareholders for a change in activities of the Company from management of an oil and gas exploration and production company to management of a mineral sands exploration and production company.

2.1 Listing Rule 11.1

Listing Rule 11.1 provides that where an entity proposes to make a significant change, either directly or indirectly, to the nature and scale of its activities, it must provide full details to ASX as soon as practicable and comply with the following:

- (a) provide to ASX information regarding the change and its effect on future potential earnings, and any information that ASX asks for;
- (b) if ASX requires, obtain the approval of holders of its shares and any requirements of ASX in relation to the notice of meeting; and
- (c) if ASX requires, meet the requirements of Chapters 1 and 2 of the Listing Rules as if the company were applying for admission to the official list of ASX.

In the event that the Acquisition completes, there will be a significant change:

- (a) to the nature of the Company's main undertaking – from an oil and gas exploration and production company to a heavy mineral sands (**HMS**) explorer and producer in Indonesia; and
- (b) to the scale of the Company's activities, both operationally and financially.

Given the Company's focus was previously on managing oil and gas assets, the effect of the completion of the Acquisition is that there will be a significant change to the nature and scale of the Company's activities.

2.2 Re-compliance with Chapters 1 and 2 of the ASX Listing Rules

ASX has indicated that as part of the Acquisition, the Company must obtain the approval of its Shareholders for the proposed change of activities, and comply with the admission requirements of Chapters 1 and 2 of the Listing Rules which prescribe the conditions for official quotation. Some of the key requirements of Chapters 1 and 2 of the ASX Listing Rules are as follows:

- (a) a prospectus must be issued and lodged with ASX;
- (b) the Company must satisfy the shareholder spread requirements relating to the minimum number of Shareholders in the Company and the minimum value of the shareholdings of those Shareholders; and
- (c) the Company must satisfy the "assets test" as set out in the ASX Listing Rules.

For this reason, the Company is seeking Shareholder approval under this Resolution 2 for the Company to change the nature and scale of its activities under Listing Rule 11.1.2.

As part of the re-compliance, the Company will seek to carry out the Public Offer through the issue of a Prospectus. Following completion of the Public Offer, the Company will have sufficient funds for the purposes of its proposed HMS activities.

Shareholders should be aware that the re-admission of the Company to the ASX is at the discretion of ASX and there can be no guarantee that the ASX will approve the re-admission on conditions that are able to be satisfied by the Company, or at all.

3. Resolution 3 – Consolidation of Capital

3.1 General

Resolution 3 seeks Shareholder approval to consolidate the Company's issued capital by consolidating every twenty (20) existing Shares into one (1) new Share (**Consolidation**). This will result in the number of securities currently on issue reducing from 365,694,211 to 18,284,711 (subject to rounding and not including those Shares to be issued under the other Resolutions in this Notice of Meeting). There are currently 10,750,000 unlisted options on issue which following the Consolidation will be reduced to

537,500 with an exercise price of AU\$1.00. It has been agreed with the relevant option holders that all other options on issue by the Company have failed to meet the requisite vesting conditions.

The purpose of the Consolidation is to implement a more appropriate capital structure for the Company going forward and enable the Company to satisfy Chapters 1 and 2 of the ASX Listing Rules and obtain re-quotation of the Shares on ASX.

The Consolidation will take effect prior to the implementation of the Acquisition but will only occur if shareholder approval of the Acquisition Resolutions is obtained and all other conditions are satisfied. An indicative timetable for the Consolidation is set out in Section 3.3 below.

Pursuant to section 254H(1) of the Corporations Act, the Company may convert all or any of its shares into a larger or smaller number of shares by resolution passed at a general meeting. Pursuant to clause 9.1 of the Company's Constitution, the Company may, by Ordinary Resolution, consolidate its share capital by the number of new Shares that such relevant Ordinary Resolution specifies.

Accordingly, Resolution 3 seeks Shareholder approval under the Corporations Act and the Company's Constitution to consolidate the Company's authorised share capital.

As the Consolidation applies equally to all Shareholders, all Shareholders will hold the same proportion of the Company's share capital and net assets before and after the Consolidation. The current rights and obligations attaching to the Shares will not be affected by the Consolidation.

Fractions of a securities resulting from the Consolidation will be rounded down to the nearest whole security. Each member's proportional interest in the Company's issued capital will, however, remain unchanged as a result of the Consolidation (other than minor variations resulting from rounding).

As from the effective date of the Consolidation, all holding statements for Shares will cease to have any effect except as evidence of entitlement to a certain number of post-Consolidation Shares.

After the Consolidation becomes effective, the Company will despatch a notice to Shareholders advising them of the number of Shares held both before and after the Consolidation. The Company will also arrange for new holding statements to be issued to Shareholders.

Taxation

It is not expected that any taxation consequences will exist for Shareholders as a result of the Consolidation. However Shareholders are advised to seek their own tax advice as neither the Company nor the Directors accept any responsibility for any taxation implications arising as a result of the Consolidation.

3.2 Effect on Capital Structure

The following table shows the effects of the Consolidation on the Shares in the Company:

Current issued share capital (pre-Consolidation)	Current issued share capital (post-Consolidation)	Shares to be issued pursuant to the Acquisition	Public Offer *	Pro-forma total issued share capital
365,694,211	18,284,711	210,274,171	35,000,000	263,558,882

** This assumes that AU\$14,000,000 is raised through the Public Offer through the issue of 35,000,000 Shares at AU\$0.40 per Share (post-Consolidation). Following the passing of the Acquisition Resolutions, the Vendors will in aggregate own 79.8% of the Company's issued Share capital, post the Public Offer.*

3.3 Indicative timetable

Set out below, and subject to compliance with all regulatory requirements, is the expected timetable for completion of the Consolidation. These dates are indicative only and may be varied without notice. Shareholders should note that given the Shares are currently suspended there is no trading of Shares and the timetable below reflects this.

Date	Event
13 December 2019	Effective date of Consolidation.
16 December 2019	First day for entity to register securities on a post-Consolidation basis and first day for issue of holding statements.
17 December 2019	Company to finalise holdings and last day for issue of holding statements.

4. Resolution 4 – Approval of issue of Acquisition Shares

4.1 General

Resolution 4 seeks Shareholder approval to issue the Acquisition Shares to the Vendors as consideration for the acquisition by the Company of all the issued capital Takmur from the Vendors. The passing of this Resolution and the issue of Acquisition Shares to the Vendors is conditional upon the Acquisition Resolutions being passed by Shareholders.

If any of the Acquisition Resolutions are not approved by Shareholders, or the Public Offer is not completed, the Acquisition Shares will not be issued and the Transaction will not proceed.

4.2 Corporations Act

Section 606 of the Corporations Act prohibits persons from acquiring a relevant interest in issued voting shares in the Company if, as a result of the acquisition, that person's or someone else's voting power in the company increases:

- (a) from less than 20% to more than 20%; or
- (b) from a starting point that is above 20% and below 90%,

(General Prohibition).

Exceptions to the above are provided by reference to section 611 (item 7) of the Corporations Act. Section 611 (item 7) of the Corporations Act provides an exception to the General Prohibition in circumstances where the shareholders of the Company approve an acquisition of shares by virtue of an allotment or acquisition at a meeting at which no votes are cast by parties involved in the proposed acquisition, including their associates.

Shareholder approval is required for the purposes of Resolution 5 as the Company will issue 210,274,171 (79.8%) (post-Consolidation) of the total issued shares of the Company to the Vendors pursuant to the terms of the Acquisition. On completion of the Acquisition, the Vendors (and their respective associates) will have a relevant interest in 20% or greater of the issued Shares in the Company and will be in a position to control the Company.

In particular, both Phoenix Fund Solutions Limited and Takmur SPC Limited will acquire more than 20% interests in the Company, appoint two board members and, with 35.11% and 31.92% ownership respectively (post-Transaction), will have the ability to block special resolutions proposed by the Company.

Accordingly, Shareholder approval is being sought pursuant to section 611 (item 7) of the Corporations Act for the issue of the Acquisition Shares to the Vendors (and their associates).

4.3 Information Requirements under Section 611 (item 7) of the Corporations Act

The following information is required to be provided to members under the Corporations Act and ASIC Regulatory Guide 74 in respect of obtaining approval under item 7 section 611 of the Corporations Act. Members are also referred to the Independent Expert's Report prepared by Stantons attached to this Notice at Schedule 1.

- (a) **Identity of Vendors and Associates:** The identity of the Vendors is set out under section 3.3 of this Notice.
- (b) **Relevant Interests and Voting Power:** The relevant interests of the Vendors are set out under Section 3.3 of this Notice.
- (c) **Reason for the Proposed Issue of Securities:** As detailed in section 1.2.1 of this Notice, the Acquisition Shares will be issued in consideration for the Company's acquisition of all of the shares in Takmur.
- (d) **Material Terms of Proposed Issue of Securities:** Refer section 1.2.1 of this Notice.
- (e) **Date of Proposed Issue of Securities:** The Acquisition Shares and Public Offer shares will be issued upon completion of the Acquisition, which is set out in the timetable in this Notice and in any event within 3 months of the date that the Resolutions are approved at the General Meeting (or such later period approved by ASX).
- (f) **Interests of Directors:** The interests of Directors and Proposed Directors are set out in Section 3.5.1. No Director or Proposed Director has an interest in Takmur.
- (g) **Intentions of the Vendors and their associates:** Except as set out in this Explanatory Statement and as a result of the Acquisition, the Vendors have advised that they have no intention of:
- requesting the Company to change its strategic direction or operational priorities;
 - injecting further capital into the Company;
 - seeking to change the Company's or Takmur's current employment arrangements; or
 - seeking to transfer the Company's assets to Vendors or their associates or otherwise redeploy the assets of the Company.
- (h) **Changes to the Board:** as set out in section 3.4, pursuant to the Acquisition it is proposed that Mr Oliver Hasler, Mr Bakhos Georges and Mr Gary J. Artmont (**Proposed Directors**) will join the Board of the Company on completion of the Transaction. Details of the Proposed Directors' qualifications and experience are set out in section 2.3. Current directors Mr Joseph Goldberg and Mr Domenic Martino will resign from the Board while Mr Alvin Tan will remain.
- (i) **Interests and recommendations of Directors:** The Directors do not have any material personal interests in the outcome of Resolution 4 and unanimously recommend that Shareholders vote in favour of Resolution 4. The Directors are not aware of any other information other than as set out in this Notice of Meeting 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 4.
- (j) **Capital Structure:** a table showing the Company's current capital structure and the pro-forma capital structure on completion of the Transaction is set out in section 1.4.

Independent Expert's Report

Under the ASIC regulatory guidance, the Company is required to engage an independent expert to review the acquisition as per RG 74.31 (and other association regulatory guidance provisions and Corporations Act) and to provide the shareholders with an opinion as to whether or not the Acquisition is "fair and reasonable" to members for the purposes of approval under section 611 item 7 of the Corporations Act.

The Independent Expert's Report also contains assessments of the advantages and disadvantages of the Acquisition and is intended to assist all members of the Company in deciding how to vote on the resolutions set out in this Notice.

The Company has engaged Stantons to prepare the Independent Expert's Report which is attached at Schedule 1 to this Notice. Stantons has opined that this transaction is fair and reasonable to the members of the Company not associated with the Vendors.

4.4 ASX Listing Rules Requirements

ASX Listing Rule 7.1 broadly provides, subject to certain exceptions, that shareholder approval is required for any issue of securities by a listed company where the securities proposed to be issued represent more than 15% of the Company's securities then on issue.

ASX Listing Rule 7.2 Exception 16 states that where Shareholder approval under item 7 of section 611 of the Corporations Act is being sought there is no requirement to seek approval of Shareholders under Listing Rule 7.1.

5. Resolution 5 – Approval of Public Offer

5.1 Background

The Company will be required to raise capital for the purposes of achieving its business objectives and satisfying the requirements of the ASX Listing Rules in relation to the re-listing of its securities. Prior to the General Meeting, the Directors will lodge disclosure document to issue 35,000,000 Shares (on a post-Consolidation basis) at an issue price of not less than A\$0.40 per Share to raise AU\$14,000,000 (**Public Offer**) (**Prospectus**).

Under ASX Listing Rule 7.1, an entity must not issue or agree to issue more equity securities in any 12 month period which amounts to more than the company's 15% annual placement capacity. An issue in excess of the 15% limit can be made with the approval of the Shareholders of the Company.

Accordingly, Resolution 5 seeks Shareholder approval under ASX Listing Rule 7.1 for the Public Offer.

5.2 Information required by Listing Rule 7.3

For the purposes of ASX Listing Rule 7.3, the following information is provided in relation to Resolution 5:

- (a) the number of new Shares to be issued is up to 35,000,000 (post-Consolidation) pursuant to the Public Offer;
- (b) the new Shares will be issued after the Consolidation Date and no later than 3 months after the date of the Meeting (or such later date to the extent permitted by any ASX waiver or modification of the ASX Listing Rules) and it is intended that allotment will occur on the same date;
- (c) the new Shares will be issued at an issue price of AU\$0.40 per Share (post-Consolidation);
- (d) the new Shares will be issued to subscribers under the Prospectus but these persons will not be related parties of the Company;
- (e) the new Shares will be issued on the same terms and conditions as the Company's existing Shares (on a post-Consolidation basis); and
- (f) details of the proposed use of funds raised under the Public Offer is set out in section 3.2.

The Directors unanimously recommend that Shareholders vote in favour of Resolution 5.

6. Resolution 6 – Change of Name to Pyx Resources Limited

Resolution 6 seeks Shareholder approval by special resolution to change the Company's name from "South Pacific Resources Limited" to "Pyx Resources Limited". The Company also proposes to change its ASX ticker code from "SPB" to "PYX" to reflect this change, subject to confirmation by ASX.

Pursuant to section 157(1)(a) of the Corporations Act, the Company may change its name by passing a special resolution to that effect. The Special Resolution must be lodged with ASIC within 14 days after it is passed.

This change in name will not in itself, affect the legal status of the Company or any of its assets or liabilities.

The Directors believe that the new name more accurately reflects the proposed commercial undertaking of the Company (mineral sands exploration and production).

Shareholder approval of Resolution 6 is subject to receipt of Shareholder approval for each of the other Acquisition Resolutions.

The Directors unanimously recommend that Shareholders vote in favour of Resolution 6.

7. Resolutions 7 to 9 – Election of Oliver Hasler, Bakhos Georges and Gary J. Artmont as Directors

As part of the terms of the Acquisition, it is proposed that Oliver Hasler will be nominated as the Chairman of the Board and Chief Executive Officer of the Company, and Bakhos Georges and Gary J. Artmont are to be elected as Directors of the Company. If approved, their appointments will commence immediately on Completion of the Acquisition.

Shareholder approval for the election of the Proposed Directors are being sought under Resolutions 7 to 9 of this Notice of Meeting for the purposes of clause 13.3 of the Company's Constitution. Shareholder approval of Resolutions 7 to 9 are subject to receipt of approval for each of the other Acquisition Resolutions.

An overview of the Proposed Director's educations, experiences and memberships are included in Section 2.3.

The Directors unanimously recommend that Shareholders vote in favour of Resolutions 7 to 9.

8. Resolution 10 – Approval to Set Directors' Fees

Resolution 10 seeks Shareholder approval for the purposes of clause 13.8 of the Company's Constitution to set the Directors' aggregate maximum fee pool at AUD\$700,000 per annum.

ASX Listing Rule 10.17 provides that an entity must not increase the total aggregate amount of directors' fees payable to all of its non-executive directors without the approval of the holders of its ordinary securities.

Approval for the payment set out in Resolution 10 is sought in accordance with clause 13.8 of the Company's Constitution and Listing Rule 10.17.

For the purposes of Listing Rule 10.17, the following information is provided:

- (a) the amount of the increase of the maximum fee pool is AUD\$200,000;
- (b) the maximum aggregate amount of directors' fees that may be paid to all of the Company's non-executive directors is AUD\$700,000 per annum;
- (c) there have been nil securities issued to non-executive directors under Listing Rule 10.11 or 10.14 with the approval of the holders of the Company's ordinary securities within the preceding three (3) years; and
- (d) a voting exclusion statement has been set out with resolution 10 in this Notice of Meeting.

9. Resolution 11 – Adoption of Stock Incentive Plan

9.1 Background

Subject to shareholder approval of this resolution 11, the Company will adopt a Stock Incentive Plan to:

- (a) establish a method by which directors or employees of SPB (**Eligible Persons**) can participate in the future growth and profitability of the Company;
- (b) provide an incentive and reward for Eligible Persons for their contributions to the Company; and
- (c) attract and retain a high standard of managerial and technical personnel for the benefit of the Company.

Shareholder approval of the Stock Incentive Plan is being sought to enable the Company to issue Awards to the Eligible Persons of the Company and to issue Shares to those Eligible Persons if they choose to exercise the Awards, without being required to include the Awards within the Company's 15% limit for the purpose of Listing Rule 7.1.

9.2 Purpose

The Board is of the opinion that the engagement and retention of highly-skilled and qualified executives and employees will be a crucial factor in the Company's ongoing commercial success. Given that the Company will, subject to shareholder approval of the Acquisition Resolutions, begin to undertake commercial activities in the mineral sands industry, the Board considers that for the purposes of achieving strategic objectives, acting as a reputable and competitive player in the market, and maximizing shareholder value, it is important to be able to offer balanced and proportionate remuneration to the Company's human capital assets.

In light of this reasoning, the Board considers that the Company can either:

- (a) offer higher cash remuneration; or
- (b) offer Awards to such Eligible Persons under a plan such as the proposed Stock Incentive Plan.

Amongst the benefits of the second option, the Board notes the benefits the Company will experience from paying out less in executive/employee pay as well as the extensive academic research which demonstrates that executives/employees who are incentivized under a stock incentive plan have greater aligned interests with the members of the Company.

9.3 ASX Listing Rules

ASX Listing Rule 7.1 (subject to some exemptions) provides that a publicly listed entity must not issue or agree to issue additional equity securities during a twelve (12) month time period which represents 15% of the number of fully paid ordinary securities on issue at the commencement of that 12 (twelve) month period without shareholder approval.

An exemption to Listing Rule 7.1 is contained within Listing Rule 7.2 Exception 9(b) which provides that Listing Rule 7.1 does not apply to issues of securities under an employee incentive scheme if within three (3) years before the issue date of such securities holders of ordinary securities have approved the issue of securities under the scheme as an exception to the rule under Listing Rule 7.1.

With the passing of Resolution 11, the Company will have the ability to issue Awards under the Stock Incentive Plan to Eligible Persons during the period up to three years from the date of approval that do not count towards the Company's 15% capacity (i.e. not requiring shareholder approval) under Listing Rule 7.1.

For the purposes of Listing Rule 7.2, Exception 9(b) the following further information is provided:

- (a) a summary of the terms of the Stock Incentive Plan is set out in Schedule 3 to these Explanatory Notes;
- (b) no securities have been issued to, or for the benefit of Eligible Persons under the Stock Incentive Plan to date. The Stock Incentive Plan will become effective and in operation after members have approved the issue of Awards under the Stock Incentive Plan in accordance with Resolution 11; and

- (c) a voting exclusion statement is required for this resolution under applicable law and regulation and has been set out with the resolution in this Notice of Meeting.

The Board recommends that the shareholders vote in favour of Resolution 11.

10. Resolution 12 – Issue of Performance Rights and Shares to Mr. Oliver Hasler

10.1 Overview

Shareholder approval is being sought in Resolution 12 to grant a total of Performance Rights enabling potentially a maximum of Shares to be issued to Mr. Oliver Hasler under the Stock Incentive Plan (subject to Shareholders approving the Stock Incentive Plan pursuant to Resolution 11). The terms of the Performance Rights are set out below:

SPB

Performance Rights

Oliver Hasler

	Number of Performance rights	Potential Number of Shares	Expiry Date	Performance Condition
1	3,250,000	3,250,000	31-Mar-20	Mr. Hasler having not tendered his resignation until 31 March 2020
2	1,936,568	387,314 580,970 774,627 968,284 968,284 - 2,904,852 2,904,852	30-Jun-20	2019 Target Sales Volume Continuous employment until 31 December 2019 Continuous employment and more than 20% - 30% of 2019 Target Sales Volume Continuous employment and more than 30% to 40% of 2019 Target Sales Volume Continuous employment and more than 40% to 75% of 2019 Target Sales Volume Continuous employment and more than 75% to 125% of 2019 Target Sales Volume (pro rata) Continuous employment and more than 125% of 2019 Target Sales Volume
3	978,261	195,652 293,478 391,304 489,130 489,130 - 1,467,391 1,467,391	30-Jun-21	2020 Target EBITDA Continuous employment until 31 December 2020 Continuous employment and more than 20% - 30% of 2020 Target EBITDA Continuous employment and more than 30% to 40% of 2020 Target EBITDA Continuous employment and more than 40% to 75% of 2020 Target EBITDA Continuous employment and more than 75% to 125% of 2020 Target EBITDA (pro rata) Continuous employment and more than 125% of 2020 Target EBITDA
4	1,278,866	255,773 383,660 511,546 639,433 639,433 - 1,918,299 1,918,299	30-Jun-21	2020 Target Sales Volume Continuous employment until 31 December 2020 Continuous employment and more than 20% - 30% of 2020 Target Sales Volume Continuous employment and more than 30% to 40% of 2020 Target Sales Volume Continuous employment and more than 40% to 75% of 2020 Target Sales Volume Continuous employment and more than 75% to 125% of 2020 Target Sales Volume (pro rata) Continuous employment and more than 125% of 2020 Target Sales Volume
5	1,141,304	228,261 342,391 456,522 570,652 570,652 - 1,711,957 1,711,957	30-Jun-22	2021 Target EBITDA Continuous employment until 31 December 2021 Continuous employment and more than 20% - 30% of 2021 Target EBITDA Continuous employment and more than 30% to 40% of 2021 Target EBITDA Continuous employment and more than 40% to 75% of 2021 Target EBITDA Continuous employment and more than 75% to 125% of 2021 Target EBITDA (pro rata) Continuous employment and more than 125% of 2021 Target EBITDA
6	1,534,639	306,928 460,392 613,856 767,319 767,319 - 2,301,958 2,301,958	30-Jun-22	2021 Target Sales Volume Continuous employment until 31 December 2021 Continuous employment and more than 20% - 30% of 2021 Target Sales Volume Continuous employment and more than 30% to 40% of 2021 Target Sales Volume Continuous employment and more than 40% to 75% of 2021 Target Sales Volume Continuous employment and more than 75% to 125% of 2021 Target Sales Volume (pro rata) Continuous employment and more than 125% of 2021 Target Sales Volume
7	1,940,350	1,940,350	31-Dec-22	Share price reaching 1.14 AUD at any time from 1 November 2019 to 31 December 2022
8	2,182,894	2,182,894	31-Dec-22	Share price reaching 1.52 AUD at any time from 1 November 2019 to 31 December 2022
9	3,432,494	3,432,494	31-Dec-22	Share price reaching 1.90 AUD at any time from 1 November 2019 to 31 December 2022
	17,675,376	21,110,195		

The Company currently provides no long term equity incentive for the Directors and Key Management. Industry trends are providing equity incentives to directors as a means of preserving cash and giving directors a performance related incentive. The Board considers that to incentivise the achievement of the Company's goals the issue of Performance Rights to Mr Hasler under the Stock Incentive Plan is warranted.

The Performance Rights offered under this Plan will be offered under the Prospectus to Mr Hasler.

10.2 ASX Listing Rules

Listing Rule 10.14 provides that a listed entity must not issue equity securities under an employee incentive scheme (which includes the Stock Incentive Plan) to a director or their associates without Shareholder approval. The proposed grant of shares to Directors therefore requires approval by Shareholders under the Listing Rules.

As the issue will be made under the Stock Incentive Plan, approval is not required under Listing Rule 7.1 (which limits the number of equity securities the Company may issue within a 12 month period to not more than 15% of the total number of ordinary securities on issue without the requirement for Shareholder approval).

Approval is also not required under Listing Rule 10.11 (which, in the absence of obtaining Shareholder approval under Listing Rule 10.14 would be necessary to issue securities to a related party of the Company).

The general terms of the shares are the same as the general terms of all Awards granted under the Stock Incentive Plan (summarised above in relation to Resolution 11 and below in Schedule 3).

10.3 Technical information required by ASX Listing Rules

For the purposes of Listing Rules 10.14 and 10.15A, the following information is provided:

- (i) the Shares will be issued to Mr Hasler, a Proposed Director of the Company, or his nominee;
- (ii) the maximum number of Shares able to be issued to Mr Hasler upon achievement of the relevant Performance Rights milestones is 21,110,195 Shares (on a post-Consolidation basis);
- (iii) issue price of the securities is nil, forming a part of the remuneration of Mr Hasler;
- (iv) as the Stock Incentive Plan is subject to approval under Resolution 11, no persons have yet received securities under the Stock Incentive Plan;
- (v) all the Proposed Directors will be entitled to participate in the Stock Incentive Plan, if approved, though this resolution relates only to Mr Hasler;
- (vi) a voting exclusion statement is included in the Notice of Meeting;
- (vii) details of any securities issued under the Stock Incentive Plan will be published in each annual report of the Company relating to a period in which securities have been issued, and that approval for the issue of the securities was obtained under ASX Listing Rule 10.14. Any additional persons (being related parties of the Company or persons referred to in Listing Rule 10.14) who become entitled to participate in the Stock Incentive Plan after this Resolution was approved and who are not named in this notice of meeting will not participate until approval is obtained under Listing Rule 10.14; and
- (viii) if Shareholders approve this resolution, the issue and allotment of the Performance Rights will be issued as soon as practicable and in any event no later than three months, after the date of this General Meeting (or such later date as permitted by any ASIC and/or ASX waiver or modification of the Listing Rules) and Shares (if appropriate milestones are reached) no later than three years, after the date of this General Meeting (or such later date as permitted by any ASIC and/or ASX waiver or modification of the Listing Rules).

10.4 Chapter 2E of the Corporations Act

The Company has formed the view that shareholder approval pursuant to Chapter 2E of the Corporations Act is not required in relation to the issue of shares to Directors. Chapter 2E prohibits the giving of a financial benefit to a related party of a public company, unless the financial benefit has been approved by shareholders, or the giving of that benefit falls within an exception set out in Chapter 2E.

Section 211 provides an exception for a benefit that comprises remuneration to an officer of a public company where such remuneration is reasonable in the circumstances of the company and that officer's particular circumstances (i.e. having regard to the responsibilities of involved in such office). Accordingly, the Company considers that the exception in section 211 of the Corporations Act applies to the proposed issue of shares to Directors.

The Chairman intends to vote undirected proxies in favour of this Resolution. The Directors, having no personal interest in Resolution 12, recommend Shareholders vote in favour of Resolution 12.

11. Resolution 13 – Replacement of Company's Constitution

11.1 General

A company may modify or repeal its constitution or a provision of its constitution by special resolution of Shareholders.

Resolution 13 seeks Shareholder approval for the repeal of the Constitution and adoption of a new constitution (**New Constitution**) in accordance with section 136 of the Corporations Act.

Since the Company adopted the Constitution in 1999, there have been changes to the Corporations Act, the Listing Rules and other regulatory requirements. There have also been developments in corporate governance practices and policies. The Directors believe it is desirable to update the Constitution and replace it with the New Constitution to reflect current corporate practice and to ensure it is in line with the present legislation and regulatory requirements in Australia rather than make numerous piecemeal amendments to the current Constitution.

The New Constitution contains a number of changes to the current Constitution, many of which are administrative or relatively minor in nature and will not result in any material change to the rights and obligations of Shareholders.

11.2 Summary of New Constitution

The key provisions of the New Constitution are summarised in Schedule 4.

11.3 Director Recommendation

The Directors recommend that Shareholders vote in favour of Resolution 13.

Resolution 13 is a special resolution. Accordingly, at least 75% of the votes cast by Shareholders present and eligible to vote at the Meeting must vote in favour of Resolution 13 for it to be passed.

The Chairman intends to exercise all available proxies in favour of Resolution 13.

5. Definitions

In this Explanatory Statement and the Notice of Meeting:

A&B means Ana and Bella Pty Ltd ACN 626 535 706.

Acquisition means the acquisition by SPB of all of the issued capital in Takmur.

Acquisition Resolutions means Resolutions 1 to 5 (inclusive), 10 to 12 (inclusive) set out in this Notice of Meeting.

Acquisition Shares means 210,274,171 Shares (post-Consolidation) to be issued to the Vendors pursuant to the terms of the Takmur Acquisition.

ASIC means the Australian Securities and Investments Commission.

ASX means ASX Limited ACN 008 624 691 or the Australian Securities Exchange operated by ASX Limited, as the context requires.

ASX Listing Rules means the Listing Rules of ASX.

Board means the board of Directors of the Company.

Business Day means Monday to Friday inclusive, except New Year's Day, Good Friday, Easter Monday, Christmas Day, Boxing Day, and any other day that ASX declares is not a business day.

CAPEX means capital expenditure.

CHESS means the Clearing House Electronic Subregistry System operated by ASX Settlement Pty Limited.

Company or **SPB** means South Pacific Resources Limited, ABN 30 073 099 171, being a company incorporated in Australia and having registered address at Level 5, 56 Pitt Street, Sydney NSW 2000.

Completion means completion of the Acquisition in accordance with its terms.

Consolidation means the 20:1 consolidation of the capital of the Company.

Consolidation Date means the date on which the Shares of the Company are consolidated pursuant to the Consolidation which the Company anticipates to be on or about 13 December 2019.

Constitution means the constitution of the Company.

Corporations Act means the *Corporations Act 2001* (Cth).

DHMS means disturbed heavy mineral sands.

Director means a current director of the Company (and where applicable includes the Proposed Directors).

Disposal means the disposal of the main undertaking of the Company, being the shares held in the Subsidiaries.

Eligible Persons means directors or employees of SPB eligible to receive benefits under the Company's Stock Incentive Plan.

Explanatory Statement means the Explanatory Statement to the Notice of Meeting.

General Meeting or **Meeting** means the extraordinary general meeting of the Company the subject of the Notice of Meeting.

Hall Chadwick means Hall Chadwick Corporate (NSW) Limited (ACN 080 462 488).

HMS means heavy mineral sands.

Independent Expert's Report means the report prepared by Stantons on the Mandiri Project as attached at Schedule 1 to this Explanatory Statement.

IPEL means Indo Pacific Energy Pty Ltd, a wholly owned subsidiary of the Company and the subject of the Disposal.

IUP-OP means "Izin Usaha Pertambangan Operasi Produksi", or Mining Business Permit for Production Operations granted by the Government of Indonesia.

Mandiri or PTIM means PT Investasi Mandiri.

Mandiri Deposit means the deposit containing heavy mineral sands located in the Kuala Kurun administration area, within the Gunung Mas Regency in Central Kalimantan approximately 170km north of the provincial capital city Palangkaraya.

Mandiri Project means Takmur's mineral sands project located on the Mandiri Tenement and includes the processing plant of Mandiri.

Mandiri Tenement means mining permit Izin Usaha Pertambangan – Operasi Produksi (IUP-OP) No. 16/DPE/IX/2010 issued by Bupati Gunung Mas on 2nd September 2010.

New Constitution means the proposed new constitution of the Company.

Notice of Meeting or Notice means this notice of meeting.

Ordinary resolution means a resolution of a General Meeting passed by a simple majority of Shareholders who (being entitled to do so) vote in person or by proxy at that meeting.

Proposed Directors means Mr Oliver Hasler, Mr. Bakhos Georges and Mr Gary J. Artmont (and includes Mr Alvin Tan as the continuing Director as relevant).

Prospectus means the prospectus issued by the Company as part of its re-compliance with Chapters 1 and 2 of the ASX Listing Rules.

PT AUM means PT Andary Usaha Makmur, a 99% owned subsidiary of Takmur.

Public Offer means the offer of 35,000,000 Shares at an issue price of A\$0.40 per Share (post-Consolidation) to raise A\$14,000,000.

Resolution means a resolution contained in this Notice of Meeting.

RTO means reverse takeover.

Section means a section of this Explanatory Statement.

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

Shareholder means a holder of legal title to Shares (collectively).

Share Purchase Agreement means the agreement between the Company and shareholders in Takmur whereby the Company has agreed to purchase all of the issued capital of Takmur.

Share Sale Agreement means the agreement between the Company, A&B and the Subsidiaries for the sale of the Company's 100% interest in the Subsidiaries to A&B.

Special resolution means a resolution of a General Meeting passed by at least 75% of votes cast by Shareholders who (being entitled to do so) vote in person or by proxy at that General Meeting.

Stantons means Stantons International Audit and Consulting Pty Ltd ACN 144 581 519.

Subsidiaries means the subsidiary companies of the Company, being Indo Pacific Energy Pty Ltd (including its wholly owned subsidiary Coral Sea Petroleum (PNG) Limited), South Pacific Resources Pty Ltd (PNG) and Pacific Shale Gas Limited.

Stock Incentive Plan means the Stock Incentive Plan subject of Resolution 11 and described more fully in Schedule 3.

Takmur means Takmur Pte Ltd.

Transaction means the Acquisition, Consolidation, Public Offer and those matters dealt with in the Acquisition Resolutions.

Vendors means the shareholders of Takmur, being Phoenix Fund Solutions Limited, Takmur SPC Limited, Sinowide International Limited, Sino Ventures Limited and Unico Holdings Limited.

Voting Power has the meaning given in the Corporations Act

AU\$ means Australian Dollar as the currency of the Commonwealth of Australia

US\$ means the currency of the United States of America

Certain Technical Terms:

m³ means cubic metres.

M means metre.

Km means kilometre

Mt means million tonnes.

HMS means heavy mineral sands

VMS means valuable mineral sands

Schedule 1 Independent Expert's Report

Level 2, 1 Walker Avenue
West Perth WA 6005
Australia

Tel: +61 8 9481 3188
Fax: +61 8 9321 1204

ABN: 42 128 908 289
AFS Licence No: 448697
www.stantons.com.au

11 November 2019

The Independent Directors
South Pacific Resources Limited
Level 5, 56 Pitt St
Sydney NSW 2000

Dear Sirs

**RE: SOUTH PACIFIC RESOURCES LIMITED ("SOUTH PACIFIC" OR "THE COMPANY") -
INDEPENDENT EXPERT'S REPORT RELATING TO THE ACQUISITION OF TAKMUR
PTE LTD ("TAKMUR")**

1. REPORT SUMMARY

Introduction

South Pacific is a junior oil and gas exploration company that is listed on the Australian Securities Exchange ("**ASX**"). South Pacific currently holds five exploration licenses in Papua New Guinea ("**PNG**"). It is proposed that the Company will dispose of its PNG assets and acquire a new mineral sands project in Indonesia, undertake a substantial issue of new shares as consideration for the project, and conduct a capital raising.

Takmur is a mineral sands exploration and processing company. Takmur's primary activity is an interest in a mineral sands project (the "**Mandiri Project**") through a contract with PT Investasi Mandiri ("**Mandiri**"). The Mandiri Project is located in Central Kalimantan, Indonesia and comprises an existing zircon mining lease, a concession area of 2032 hectares, and an existing processing plant that has commenced preliminary small scale production.

On 7 August 2019, South Pacific announced that it had signed a sale and purchase agreement to acquire 100% of the outstanding capital of Takmur. As part of the Transaction, South Pacific will:

- undergo a 20 for 1 consolidation of its outstanding shares;
- issue 210,274,171 post consolidation ordinary shares at a notional issue price of A\$0.40 to the vendors of Takmur;
- undertake a capital raising under a prospectus, to issue 35,000,000 post consolidation ordinary shares at an issue price of A\$0.40 per share, raising A\$14,000,000 (expected to raise A\$10,338,570 after contingent transaction costs); and
- rename the company to Pyx Resources Limited.

Shareholder approval will also be sought for the Company to change its scale and activities concurrently to the proposed Transaction, pursuant to ASX Listing Rule 11.1.2.

Trading of shares in the Company on ASX has been suspended since prior to the announcement. As a result of the Transaction, the Company will be required to re-comply with Chapters 1 and 2 of the ASX Listing Rules so that subsequent to the completion of the Transaction it can be re-admitted to the ASX.

Full details of the proposed Transaction can be found in Section 2 of this report.

Purpose of the Report

If the proposed Transaction is approved, the vendors of Takmur will collectively acquire an interest of up to 79.8% of the voting shares in South Pacific. Individually, two vendors will hold more than 20% of the voting shares in South Pacific, including Phoenix Fund Solutions Limited (35.1%) and Takmur SPC Limited (31.9%). An acquisition of securities that enables a shareholder to increase its relevant interests in a public company from below 20% to above 20% is prohibited, except in certain circumstances. One of the exceptions is if the acquisition is approved at a general meeting of shareholders of the company. Approval is therefore being sought at a general meeting of South Pacific shareholders.

In order to assist shareholders to evaluate the Transaction, Stantons International Securities Pty Ltd ("SIS") have been instructed by the independent directors of South Pacific to prepare an Independent Expert's Report ("IER"), to determine whether the proposed Transaction is fair and reasonable to the shareholders of South Pacific who are entitled to vote on the resolutions to approve the Transaction (the "**Non-Associated Shareholders**").

The Transaction will be outlined in a Notice of Meeting ("**Notice**") and Explanatory Memorandum ("**EM**") to be provided to shareholders in or around November 2019. This IER is intended to accompany the Notice and EM.

Basis of Evaluation

In order to assess whether the proposed Transaction is fair and reasonable we have assessed it as:

- fair if the value of a South Pacific share after the proposed Transaction, on a minority basis, is greater than or equal to the value of a South Pacific share prior to the proposed Transaction, on a control basis; and
- reasonable if it is fair, or despite not being fair, the advantages to Non-Associated Shareholders outweigh the disadvantages.

Further details of the basis of evaluation are detailed in Section 3 of this report.

Our analysis is presented in US dollars as the default currency, unless otherwise stated. This is as US dollars is the reporting currency of the business being acquired, and we understand South Pacific will be reporting in US dollars following the Transaction.

The Proposed Transaction is Fair

Using a net assets based valuation methodology, we have assessed the fair market value of a South Pacific share, prior to the Transaction, on a control basis to be nil, as the Company is currently in a net liability position.

	Ref	Value \$US
Net assets/(liabilities) of the Company	5.5	(223,407)
Number of shares on issue (post consolidation basis) ('000)	4.4	18,285
Value per South Pacific Share - Control Basis (\$US)	8.1	(0.0122)

We have determined the fair market value of the post-Transaction combined entity using a Net Assets valuation method. This assessment uses a minority interest basis, which is consistent with the existing shareholders ceding control and being diluted down to a minority position.

	Ref	Low \$US	Preferred \$US	High \$US
Existing net assets/(liabilities) of the Company	5.5	(223,407)	(223,407)	(223,407)
Value of Takmur interests acquired	9.2	8,226,338	15,280,088	22,333,838
Capital raising (net of transaction costs)		7,133,613	7,133,613	7,133,613
Net Assets/(Liabilities)		15,136,545	22,190,295	29,244,045
Number of ordinary shares on issue (post consolidation basis) ('000)	4.4	263,559	263,559	263,559
Value per South Pacific Share - Control Basis (\$US)		0.0574	0.0842	0.1110
Discount for minority interest basis	10.9	23.1%	23.1%	23.1%
Value per South Pacific Share - Minority Basis (\$US)	10.6	0.0442	0.0648	0.0854

As the value of a South Pacific share post-Transaction on a minority basis is greater than the value of a South Pacific share pre-Transaction on a control basis, the Transaction is considered fair.

Further details of our valuations are provided in Section 10.

CSA Technical Assessment and Valuation Report

As part of this IER, SIS engaged CSA Global Pty Ltd ("CSA") to act as specialist expert to provide an Independent Technical Assessment and Valuation report on the mineral interests of Takmur and the oil and gas interests currently held by South Pacific (the "CSA Report"). The CSA Report was prepared in accordance with JORC and VALMIN codes. Our net asset valuation methodologies are based on the current market value (as defined in the VALMIN Code) of the resource assets as assessed in the CSA Report.

We have used and relied on the CSA Report in assessing the fair value of South Pacific's oil and gas interests, and Takmur's mineral interests, and have satisfied ourselves that:

- CSA is a suitable geological consulting firm and has relevant experience in assessing the merits of both mineral and hydrocarbon projects and preparing resource asset valuations (also the principal author of the report, Graham Jeffress, is suitably qualified and experienced);
- CSA and Graham Jeffress are independent of South Pacific and Takmur; and
- CSA and Graham Jeffress have employed sound and recognised methodologies in the preparation of the CSA Report on South Pacific and Takmur's mineral and hydrocarbon interests.

A summary of the CSA Report is provided in Sections 8.5 to 8.8 and 9.4 to 9.17 and the full report in Appendix D.

The Proposed Transaction is Reasonable

As the Transaction is considered fair, the proposed Transaction is also considered reasonable. We have nonetheless included a discussion on the advantages and disadvantages to Non-Associated Shareholders for information purposes.

Advantages

We have identified the following advantages of the proposed Transaction to the Non-Associated Shareholders of South Pacific:

- The Transaction is considered fair.
- The Company, by increasing mineral prospects via the acquisition and associated capital raising, increases its opportunity for project and commercial success.
- Increases the relevance of the Company to ASX and investors.
- The Company may be able to raise further funds by way of new equity as a result of acquiring an interest in a development project. The raising of new capital may revitalise the Company and allow it to increase the value of the project.
- If the Transaction does not proceed, there is a risk the share price could fall.
- The Transaction may allow the Company to maintain its ASX listing and provide a liquid market for existing shareholders.
- If the Transaction does not proceed, there is a risk the Company may fall into administration and/or not maintain its ASX listing.
- Whilst the Mandiri Project currently is only licensed for mining of zircon, other commodities including gold have been identified and present upside opportunity.

Disadvantages

We have identified the following disadvantages of the proposed Transaction to shareholders of South Pacific:

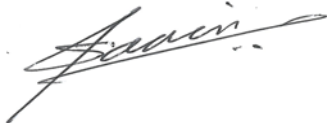
- Significant dilution of the Non-Associated Shareholders will occur, with ordinary shares representing up to a 93.1% interest in the Company to be issued as a result of the Transaction.
- Liquidity in the Company's shares may not increase significantly as there will be a consolidation, and a portion of the new shares issued to the vendors of Takmur will be subject to escrow.
- Exposure to country risk due to operations being based in Indonesia.
- Concentrated exposure to the price of zircon.
- The Company has the obligation to spend US\$15 million on the project and may be required to undertake a subsequent capital raising in order to fund this obligation.
- Other risks relating to the Mandiri Project have been outlined in the CSA Report in Appendix D.

Opinion

In our opinion, the proposed Transaction is fair and reasonable to the Non-Associated Shareholders of South Pacific. This opinion must be read in conjunction with the more detailed analysis made in this report, together with the disclosures, Financial Services Guide and appendices to this report.

Yours faithfully

STANTONS INTERNATIONAL SECURTIES PTY LTD
(Trading as Stantons International Securities)



Samir Tirodkar

Director

For personal use only

FINANCIAL SERVICES GUIDE

Dated 11 November 2019

STANTONS INTERNATIONAL SECURITIES PTY LTD (TRADING AS STANTONS INTERNATIONAL SECURITIES)

Stantons International Securities Pty Ltd (ABN 42 128 908 289 and AFSL Licence No 448697) ("**SIS**" or "**we**" or "**us**" or "**ours**" as appropriate) has been engaged to issue general financial product advice in the form of a report to be provided to you.

Financial Services Guide

In the above circumstances, we are required to issue to you, as a retail client, a Financial Services Guide ("**FSG**"). This FSG is designed to help retail clients make a decision as to their use of the general financial product advice and to ensure that we comply with our obligations as financial services licensees.

This FSG includes information about:

- who we are and how we can be contacted;
- the services we are authorised to provide under our **Australian Financial Services Licence, Licence No: 448697**;
- remuneration that we and/or our staff and any associated receive in connection with the general financial product advice;
- any relevant associations or relationships we have; and
- our complaints handling procedures and how you may access them.

Financial services we are licensed to provide

We hold an Australian Financial Services Licence which authorises us to provide financial product advice in relation to:

- Securities (such as shares, options and debt instruments)

We provide financial product advice by virtue of an engagement to issue a report in connection with a financial product of another person. Our report will include a description of the circumstances of our engagement and identify the person who has engaged us. You will not have engaged us directly but will be provided with a copy of the report as a retail client because of your connection to the matters in respect of which we have been engaged to report.

Any report we provide is provided on our own behalf as a financial services licensee authorised to provide the financial product advice contained in the report.

General Financial Product Advice

In our report, we provide general financial product advice, not personal financial product advice, because it has been prepared without taking into account your personal objectives, financial situation or needs. You should consider the appropriateness of this general advice having regard to your own objectives, financial situation and needs before you act on the advice. Where the advice relates to the acquisition or possible acquisition of a financial product, you should also obtain a product disclosure statement relating to the product and consider that statement before making any decision about whether to acquire the product. Where you do not understand the matters contained in the Independent Expert's Report, you should seek advice from a registered financial adviser.

Benefits that we may receive

We charge fees for providing reports. These fees will be agreed with, and paid by, the person who engages us to provide the report. Fees will be agreed on either a fixed fee or time cost basis. Our expected fee for preparing this report is A\$35,000 exclusive of GST.

You have a right to request further information in relation to the remuneration, the range of amounts or rates of remuneration and you can contact us for this information.

Except for the fees referred to above, neither SIS, nor any of its directors, employees or related entities, receive any pecuniary benefit or other benefit, directly or indirectly, for or in connection with the provision of the report.

Remuneration or other benefits received by our employees

SIS has no employees and Stantons International Audit and Consulting Pty Ltd charges a fee to SIS. Stantons International Audit and Consulting Pty Ltd employees are eligible for bonuses based on overall productivity but not directly in connection with any engagement for the provision of a report.

Referrals

We do not pay commissions or provide any other benefits to any person for referring customers to us in connection with the reports that we are licensed to provide.

Associations and relationships

SIS is ultimately a wholly owned subsidiary of Stantons International Audit and Consulting Pty Ltd a professional advisory and accounting practice. From time to time, SIS and Stantons International Audit and Consulting Pty Ltd (that trades as Stantons International) and/or their related entities may provide professional services, including audit, accounting and financial advisory services, to financial product issuers in the ordinary course of its business.

Complaints resolution

Internal complaints resolution process

As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. All complaints must be in writing, addressed to:

The Complaints Officer
Stantons International Securities Pty Ltd
Level 2
1 Walker Avenue
WEST PERTH WA 6005

When we receive a written complaint, we will record the complaint, acknowledge receipt of the complaints within 15 days and investigate the issues raised. As soon as practical, and not more than 45 days after receiving the written complaint, we will advise the complainant in writing of our determination.

Referral to External Dispute Resolution Scheme

A complainant not satisfied with the outcome of the above process, or our determination, has the right to refer the matter to the Australian Financial Complaints Authority (“**AFCA**”). AFCA has been established to provide free advice and assistance to consumers to help in resolving complaints relating to the financial services industry.

Further details about AFCA are available at the AFCA website www.afca.org.au or by contacting them directly via the details set out below.

Australian Financial Complaints Authority Limited
GPO Box 3
MELBOURNE VIC 3001

Telephone: 1800 931 678

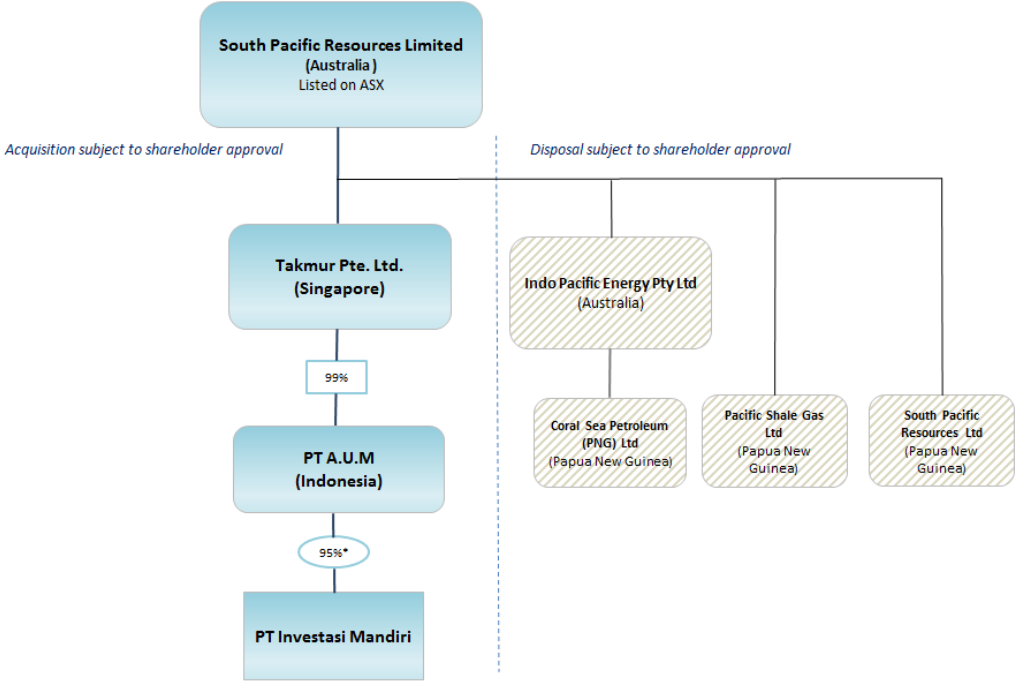
SIS confirms that it has arrangements in place to ensure it continues to maintain Professional Indemnity insurance in accordance with s.912B of the Corporations Act 2001 (as amended). In particular our Professional Indemnity insurance, subject to its terms and conditions, provides up to the Sum Insured for SIS and our authorised representatives / representatives / employees in respect of our authorisations and obligations under our Australian Financial Services Licence. This insurance will continue to provide such coverage for any authorised representative / representative / employee who has ceased work with SIS for work done whilst engaged with us.

Contact details

You may contact us using the details set out at above or by phoning (08) 9481 3188 or faxing (08) 9321 1204.

2. THE PROPOSED TRANSACTION

- 2.1 South Pacific is an ASX listed company that currently operates as a junior oil and gas exploration company through five exploration licenses for tenements located in PNG.
- 2.2 Takmur is a Singaporean company that is involved in mineral sands exploration and production in Indonesia.
- 2.3 On 7 August 2019, South Pacific announced via the ASX its intention to undertake a proposed transaction involving the acquisition of Takmur, which through its 99% owned subsidiary PT Andary Usaha Makmur ("**PT AUM**") holds the exclusive rights to the operation and management, and a 95% economic interest in, the zircon project owned by Mandiri.
- 2.4 The key terms of the transaction are below.
- (a) South Pacific will undertake a 20 to 1 consolidation of its existing capital, reducing the number of the Company's shares outstanding to 18,284,711.
 - (b) South Pacific will acquire 100% of the issued capital of Takmur in exchange for the issue of 210,274,171 post-consolidation ordinary shares to the vendors of Takmur.
 - (c) South Pacific will undertake a capital raising, under a prospectus, of A\$14,000,000 (US\$9,410,800) via the issue of 35,000,000 post-consolidation ordinary shares at an issue price of A\$0.40 per share. Transaction costs associated with the raising and Transaction are expected to be A\$3,954,836 (US\$2,728,837) of which A\$293,406 (US\$202,450) are already committed and A\$3,661,430 (US\$2,526,387) are contingent on the Transaction.
- 2.5 Collectively the above are referred to as the "**Transaction**".
- 2.6 Shareholder approval will also be sought for the Company to change its scale and activities concurrently to the proposed Transaction, pursuant to ASX Listing Rule 11.1.2.
- 2.7 Separately, but contemporaneously, South Pacific's existing PNG-based oil and gas assets are to be spun off to an unrelated party, Ana and Bella Pty Ltd, for consideration of A\$1.
- 2.8 Under the terms of the Operation and Management Contract ("**Operation and Management Contract**"), PT AUM has an obligation to invest "up to US\$15 million" (sic) over a period of 10 years in mining equipment and activities.
- 2.9 The currency of reporting for Takmur is US dollars, while the reporting currency for South Pacific has been Australian dollars (though we understand this is expected to change to US dollars subsequent to the Transaction). The CSA report also reports their valuations in US dollars. All figures in this report are presented in US dollars unless otherwise stated.
- 2.10 The corporate structure for the Transaction is as follows:



All Subsidiaries are owned 100% unless otherwise noted
* Economic interests through operation and management agreement

3. SCOPE

Purpose of the Report

- 3.1 If the proposed Transaction is approved, the vendors of Takmur will collectively acquire a significant interest in South Pacific of up to 79.8%. Individually, two of the vendors will hold more than 20% of the voting shares of South Pacific, being Phoenix Fund Solutions Limited (35.1%) and Takmur SPC Limited (31.9%).
- 3.2 An acquisition of securities that enables a shareholder to increase its relevant interests in a listed company from below 20% to above 20% is prohibited under Section 606 of the Corporations Act 2001 ("**s606**"), except in certain circumstances.
- 3.3 One of the exceptions to s606 is where the acquisition is approved at a general meeting of the company in accordance with Item 7 of Section 611 of the Corporations Act ("**s611**"). Approval for the proposed Transaction is therefore being sought at a general meeting of South Pacific's shareholder's in accordance with Item 7 of s611.
- 3.4 Item 7 of s611 requires shareholders to be provided with all information known to the Company, and to the potential acquirer, that is material to the shareholders' decision. *Regulatory Guide 74: Acquisitions Approved by Members ("RG74")* issued by the Australian Securities and Investments Commission ("**ASIC**") provides additional guidance on the information to be provided to shareholders. RG74 states that the directors of the target company should usually provide shareholders with an independent expert's report on the proposed transaction.
- 3.5 *Regulatory Guide 111: Content of Expert Reports ("RG111")* issued by ASIC requires an independent expert assessing a transaction that has similar effect to a takeover bid to assess whether the transaction is fair and reasonable.

Basis of Evaluation

- 3.6 As the vendors of Takmur will hold the majority of the shares outstanding in South Pacific should the proposed Transaction be approved, we have assessed the proposed Transaction as a control transaction. RG111 requires a separate assessment of whether a control transaction under s611 is '*fair*' and whether it is '*reasonable*'. We have therefore considered the concepts of '*fairness*' and '*reasonableness*' separately. The basis of assessment selected and the reasons for that basis are discussed below.

Fairness

- 3.7 RG111.25 requires an independent expert to evaluate a proposed issue of securities under Item 7 of s611 as if it were a takeover offer. RG111.11 defines a takeover offer as being fair if the value of the consideration is equal to, or greater than, the value of the securities subject to the offer.
- 3.8 Accordingly, we have assessed whether the proposed Transaction is fair by comparing the value of a South Pacific share before the Transaction with the consideration offered to Non-Associated Shareholders. As shareholders would retain their South Pacific shares if the proposed Transaction proceeds (as opposed to exchanging them for cash or the acquirer's scrip as in a takeover offer) the effective consideration is the continued ownership of a South Pacific share, which will become a share in the proposed enlarged entity.
- 3.9 The value of a South Pacific share before the proposed Transaction has been determined on a control basis (i.e. including a control premium). This is consistent with the requirement of RG111.11 that the comparison for a takeover must assume a 100% interest in the target company.
- 3.10 After the proposed Transaction, a South Pacific share will effectively be a share in the proposed combined entity (i.e. South Pacific and Takmur combined, post the capital raising).

This has been assessed on a minority basis (i.e. excluding a control premium) as shareholders would own a minority stake in the proposed combined entity should the proposed Transaction occur.

- 3.11 We have assessed the values of existing South Pacific shares and the resultant combined entity's shares at fair market value, which is defined by the International Glossary of Business Valuation Terms as:

The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.

- 3.12 We note this is not inconsistent with the definition of market value as defined by the VALMIN code, in which market value is defined as:

The estimated amount (or the cash equivalent of some other consideration) for which the mineral asset should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after appropriate marketing where the parties had each acted knowledgeably, prudently and without compulsion.

- 3.13 While there is no explicit definition of value in RG111, we believe this definition of fair market value is consistent with RG111.11 and common market practice.

Reasonableness

- 3.14 In accordance with RG111, we have defined the proposed Transaction as being reasonable if it is fair, or if, despite not being fair, SIS believes that there are sufficient reasons for Non-Associated Shareholders to vote for the proposal. We have therefore considered whether the advantages to Non-Associated Shareholders of the proposed Transaction outweigh the disadvantages. To assess the reasonableness of the proposed Transaction we have considered the following significant factors recommended by RG111.13.

- The size of existing shareholding blocks in South Pacific including any interests held by the vendors of Takmur
- The liquidity of the market in South Pacific's shares
- The likely market price of South Pacific shares if the proposed Transaction is rejected
- The value of South Pacific to an alternative bidder and the likelihood of an alternative offer

- 3.15 We have also considered other advantages and disadvantages to Non-Associated Shareholders of the proposed Transaction. Please refer to Section 10.12.

Individual Circumstances

- 3.16 We have evaluated the proposed Transaction for Non-Associated Shareholders as a whole. We have not considered its effect on the particular circumstances of individual investors. Due to their personal circumstances, individual investors may place a different emphasis on various aspects of the proposed Transaction from the one adopted in this report. Accordingly, individuals may reach a different conclusion to ours on whether the proposed Transaction is fair and reasonable. If in doubt investors should consult an independent financial adviser about the impact of this proposed Transaction on their specific financial circumstances.

4. IMPLICATIONS OF THE PROPOSED TRANSACTION

Current Capital Structure

4.1 As at 11 November 2019, the equity capital structure of South Pacific was as follows:

Security	Number
Fully paid ordinary shares	365,694,211
Unlisted options (see 4.2)	10,750,000
Unlisted options (see 4.3)	5,000,000
Total securities on issue	381,444,211

4.2 We note that there were 10,750,000 unlisted options issued to Tamarind Classic Resources Limited on 22 February 2018, with an exercise price of A\$0.05 and an expiry date of 22 February 2023. Post-consolidation these will total 537,500 options with an exercise price of A\$1.00.

4.3 Additionally, 20,000,000 unlisted options were granted to Tamarind Management SDN BHD, of which 5,000,000 are still outstanding. These options have an exercise price of \$0.15 and an expiry date of 24 November 2019. However, we note that the vesting condition will not be met and therefore we have ignored these for the purpose of our analysis.

Effect of Transaction on Capital Structure

4.4 Should the Transaction proceed, it will have the following effect on the capital structure:

	Ordinary shares	%	Options	Total	%
Existing securities	365,694,211	100.0	10,750,000	376,444,211	100.0
Existing securities post 20:1 consolidation	18,284,711	6.9	537,500	18,822,211	7.1
Takmur acquisition consideration shares	210,274,171	79.8		210,274,171	79.6
Capital raising share issue	35,000,000	13.3		35,000,000	13.3
Total securities issued	245,274,171	93.1		245,274,171	92.9
Post transaction securities	263,558,882	100.0	537,500	264,096,382	100.0

4.5 We note that successful completion of the capital raising is a condition precedent of the Transaction. If any of the resolutions are not passed or the capital raising is not successfully completed, the Transaction will not proceed.

4.6 Note we have assumed A\$14,000,000 will be raised through the capital raising.

5. PROFILE OF SOUTH PACIFIC

Principal Activities

- 5.1 South Pacific is a junior oil and gas exploration company listed on the ASX. Its primary activity is oil and gas exploration, through 100% ownership of five exploration licenses in PNG, covering an area of 11,972 km². These licenses consist of both offshore and onshore regions, and four are located in the Papuan Basin. Due to a fall in oil prices and a lack of prospectivity of the tenements, South Pacific intends to sell these tenements and change its focus to the Mandiri Project.

Directors of South Pacific

- 5.2 The current directors of South Pacific are:

- Mr Dominic Martino (Managing Director)
- Mr Alvin Tan (Non-Executive Director)
- Mr Joseph Goldberg (Non-Executive Director)

Top Shareholders of South Pacific

- 5.3 As at 6 September 2019, the top 20 shareholders of South Pacific were as follows:

Name	Number held	%
Tamarind Resources Private Limited	59,024,614	16.1
CA Resources Pty Ltd	47,110,393	12.9
Lightglow Enterprise Pty Ltd	23,927,578	6.5
Fanucci Pty Ltd	22,433,333	6.1
Transaction Services Pty Ltd	21,773,051	6.0
BNP Paribas Noms Pty Ltd	21,450,000	5.9
Indian Ocean Capital Pty Ltd	16,866,667	4.6
Ostle International Pty Ltd	14,800,000	4.0
HSBC Custody Nominees (Australia) Limited	13,040,996	3.6
JP Morgan Nominees Australia Limited	12,419,345	3.4
Guangzhou Financial Pty Ltd	7,750,000	2.1
Insight Exploration Pty Ltd	7,697,809	2.1
Mr Julian Sandt	6,300,000	1.7
McNeil Nominees Pty Ltd	4,937,175	1.4
Ms Natalia Albuquerque Silva	3,600,000	1.0
MDC Funds Pty Ltd	3,028,388	0.8
Mr Colin Weekes	2,751,005	0.8
Ms Sara Louise Hawkins	2,537,500	0.7
Australian Executor Trustees Limited	2,535,205	0.7
RoadHound Electronics Pty Ltd	2,533,668	0.7
Top 20 shareholders	296,516,727	81.1
Other shareholders	69,177,484	18.9
Total ordinary shareholders	365,694,211	100.0

Financial Position of South Pacific

5.4 Set out below is South Pacific's audited statement of financial position as at 30 June 2019.

5.5 The statement of financial position has been adjusted to show an estimated position as at 30 September 2019 as follows:

- Estimated administration and corporate costs between 1 July 2019 and 30 September 2019 of A\$20,000 in accordance with the estimate provided in South Pacific's June Quarterly Cashflow Report.
- Pursuant to the Company's Notice of Meeting dated 17 July 2019, we note that shareholders recently approved the issue of ordinary shares for the conversion of certain trade creditors and convertible notes owed by the Company. These shares have subsequently been issued, and the amounts owing have been discharged. A total of 200,178,900 shares were issued at a price of A\$0.015 per share, broken down as follows:
 - Third party trade creditors were issued with 58,958,202 shares as full and final settlement for the amount of A\$884,373.
 - Related party trade creditors were issued with 82,196,084 ordinary shares as full and final settlement for the amount of A\$1,232,941.
 - The convertible note holder was issued with 59,024,614 ordinary shares as full and final settlement for the amount owing of A\$885,369 (including interest), as payment for the redemption of convertible notes at a price of A\$0.015 per share.
- Fixed transaction costs of A\$293,406 have been added to the payables balance. These costs are assumed to have already been committed since they are payable regardless of whether the Transaction is completed.
- We note that the equity balance has been converted into US dollars at the historical translation rate, as per the Notice.

	Audited 30 June 2019 \$A	Audited 30 June 2019 \$US	Adjustments \$US	Adjusted 30 Sept 2019 \$US
Assets				
Current Assets				
Cash and cash equivalents	4,646	3,258	-	3,258
Trade and other receivables	14,348	10,062	-	10,062
Total Current Assets	18,994	13,320	-	13,320
Non-Current Assets				
Rental bond	50,000	35,065	-	35,065
Exploration expenditure	-	-	-	-
Plant & equipment	648	454	-	454
Total Non-Current Assets	50,648	35,519	-	35,519
Total Assets	69,642	48,840	-	48,840
Liabilities				
Current Liabilities				
Trade and other payables	(2,347,706)	(1,646,446)	1,436,703	(209,743)
Borrowings	(913,464)	(640,612)	578,109	(62,503)
Total Current Liabilities	(3,261,170)	(2,287,059)	2,014,812	(272,247)
Total Liabilities	(3,261,170)	(2,287,059)	2,014,812	(272,247)
Net Assets/(Liabilities)	(3,191,528)	(2,238,219)	2,014,812	(223,407)
Equity				
Issued capital	6,830,356	6,377,443	2,691,205	9,068,648
Share based payment reserve	592,497	438,684	-	438,684
Accumulated losses	(10,614,381)	(9,054,345)	(676,393)	(9,730,738)
Total Equity	(3,191,528)	(2,238,219)	2,014,812	(223,407)

Financial Performance of South Pacific

- 5.6 A summarised audited statement of comprehensive income for South Pacific for the financial years ended 30 June 2017, 30 June 2018 and 30 June 2019, in Australian dollars, is set out below.

	12 months to 30 June 2017	12 months to 30 June 2018	12 months to 30 June 2019
	A\$	A\$	A\$
Gain on modification of convertible note	2	67,744	10,464
Gain on extinguishment of financial loss	-	-	203,825
Net foreign exchange gain/(loss)	22,806	7,919	-
Total other income	22,808	75,663	214,289
Consultancy and other professional fees	(453,363)	(416,018)	(435,132)
Computer and office expenses	(138,294)	(137,368)	(143,041)
Impairment of exploration and evaluation expenditure	(392,741)	(49,245)	(7,381)
Interest expense	-	-	(187,849)
Loss on extinguishment of convertible note	-	-	(4,226)
Convertible interest	(1,560)	(271,649)	(166,723)
Scoping study expense	-	(348,252)	-
Travel and entertainment expenses	(62,732)	(1,717)	(2,333)
Other expenses	(126,211)	(57,080)	(65,470)
Total expenditure	(1,174,901)	(1,281,329)	(1,012,155)
Loss from ordinary activities before income tax	(1,152,093)	(1,205,666)	(797,866)
Income tax	-	-	-
Loss after tax	(1,152,093)	(1,205,666)	(797,866)
Exchange differences on translating foreign operations	(15,765)	(6,494)	(11,773)
Other comprehensive loss for period	(15,765)	(6,494)	(11,773)
Total comprehensive loss for period	(1,167,858)	(1,212,160)	(809,639)

- 5.7 In assessing South Pacific's financial position and objectives, it is unlikely to pay dividends to ordinary shareholders in the near future.

6. PROFILE OF TAKMUR

Principal Activities

- 6.1 Takmur is a Singapore based mineral sands exploration and production company, with operations based in Indonesia. It holds an interest in the Mandiri Project based in central Kalimantan through its 99% owned subsidiary, PT AUM. PT AUM holds a 95% economic interest in the Mandiri Project through an exclusive Operation and Management Contract with Mandiri. The Mandiri Project includes a fully licensed tenement with mineral sands deposits, and a processing facility located 23 km south of the tenement, which has already commenced small scale production.
- 6.2 The Mandiri Project includes an area that contains a variety of minerals, although is currently only licensed to extract zircon. Mandiri has exclusive rights to perform exploration and mining activities in the tenement area.
- 6.3 Due to the requirements of the Indonesian Government, a processing plant is required in order to obtain an export permit for minerals. Small scale production has already commenced at the facility, and during the year 2018, 3,000 tonnes of zircon was reported to be produced. To date, operations have been conducted through contract miners that operate under agreements to deliver heavy mineral concentrate to be processed through the production facility.
- 6.4 Further details on the Mandiri Project are provided in the CSA Report at Appendix D.

Directors of Takmur

- 6.5 The current directors of Takmur are:

- Meity Erawaty Ewa
- Ong Chuan Heng

Following the Transaction, it is expected that Mr Oliver Hasler, Mr Bakhos Georges, and Mr Gary J. Artmont will join the board of the enlarged Company. South Pacific's current director Mr Alvin Tan will also continue in his current role. Further details on the background of the proposed board members can be found in the Notice.

Shareholders of Takmur

- 6.6 The current shareholders and vendors of Takmur are, as at 7 August 2019:

Vendor Name	Number of shares	%
Phoenix Fund Solutions Ltd	1,100	44.0
Takmur SPC Ltd	1,000	40.0
Sinowide International Ltd	135	5.4
Sino Ventures Ltd	130	5.2
Unico Holdings Ltd	135	5.4
Total	2,500	100.0

Financial Position of Takmur and its Subsidiaries

- 6.7 Set out below is the auditor reviewed consolidated statement of financial position for Takmur and its controlled entities (including PT AUM and Mandiri), as at 30 June 2019.

As at 30 June 2019	
US\$	
Assets	
Current assets	
Cash and cash equivalents	210,750
Trade and other receivables	202,718
Inventories	472,202
Other assets	120,594
Total current assets	1,006,264
Non-current assets	
Trade and other receivables	201,000
Property plant and equipment	681,584
Intangible assets	7,774
Mineral interests	-
Total non-current assets	890,358
Total assets	1,896,622
Liabilities	
Current liabilities	
Trade and other payables	(600,874)
Lease liabilities	(43,594)
Current tax liabilities	(212,826)
Total current liabilities	(857,294)
Non-current liabilities	
Lease liabilities	(42,557)
Total non-current liabilities	(42,557)
Total liabilities	(899,851)
Net assets	996,771
Equity	
Issued capital	1,178
Reserves	2,636
Retained earnings	231,195
Equity attributable to owners of parent entity	235,009
Non-controlling interest	761,762
Total equity	996,771

6.8 We note the significant non-controlling interest in Takmur's accounts is due to the nature of Takmur control over Mandiri through the Operation and Management Contract.

Financial Performance of Takmur

- 6.9 A summarised pro forma audited statement of comprehensive income for Takmur and its controlled entities for the financial years ended 31 December 2018 and 31 December 2019, and auditor reviewed for the half year ended 30 June 2019, is set out below. We note that Takmur was incorporated on 28 June 2018 and acquired its interest in PT AUM on 10 January 2019. PT AUM entered into the Operation and Management Contract on 24 January 2019.

	12 months to 31 Dec 2017	12 months to 31 Dec 2018	6 months to 30 June 2019
	US\$	US\$	US\$
Revenue	1,217,814	4,760,828	2,903,161
Cost of sales	(756,157)	(3,548,573)	(2,076,133)
Gross profit	461,657	1,212,255	827,028
Interest income	-	-	5,456
Other revenue	30,569	-	39,200
Depreciation and amortisation	(48,246)	(60,216)	(32,056)
Finance costs	(11,858)	(25,915)	(5,301)
Consulting and professional expenses	(147,877)	(120,849)	(198,596)
Repairs and maintenance expenses	(57,543)	(88,861)	(26,939)
Freight and cartage expenses	(113,512)	(209,513)	-
Administration expense	(43,243)	(159,974)	-
Commissions paid	(3,113)	(29,624)	-
Employee benefits expense	(45,098)	(43,480)	(42,313)
Compliance costs	(11,022)	(10,985)	(30,650)
Other expenses	(28,066)	(59,150)	(212,726)
Profit/(loss) before income tax	(17,352)	403,688	323,103
Income tax expense	(1,820)	(100,922)	(84,264)
Profit/(loss)	(19,172)	302,766	238,839
Other comprehensive income	-	-	2,636
Total comprehensive income	(19,172)	302,766	241,475

7. VALUATION METHODOLOGY

Available Valuation Methodologies

7.1 In assessing the value of South Pacific and the proposed combined entity (inclusive of Takmur), we have considered a range of common market practice valuation methodologies in accordance with RG 111. The valuation methodologies we have considered in determining a fair value of South Pacific shares are noted below.

- Capitalisation of Future Maintainable Earnings (“FME”)
- Discounted Future Cash Flows (“DCF”)
- Asset Based Methods, including Net Assets method (“Net Asset”)
- Analysis of share market trading
- Alternative transactions analysis

7.2 Each of these methods is appropriate in certain circumstances and often more than one approach is applied. The choice of methods depends on several factors such as the nature of the business being valued, the return on the assets employed in the business, the valuation methodologies usually applied to value such businesses and the availability of required information. A detailed description of these methods and when they are appropriate is provided in Appendix B.

Selected Primary Methodology –South Pacific Pre-Transaction

7.3 In selecting an appropriate valuation methodology to value the shares of South Pacific, we have considered the following factors:

- South Pacific has limited ongoing business activities and has a large degree of uncertainty regarding its future earnings potential. Therefore, the FME and DCF methods are not appropriate.
- To our knowledge, as at the date of this report there have not been any alternative offers made for South Pacific, thus the use of an offer-based method is not appropriate.
- Historical liquidity of South Pacific shares traded on the ASX has been very low, with many days of no trading activity whatsoever. Therefore, traded market prices are not a reliable measure as a primary method for the value of South Pacific shares.
- The main assets of South Pacific are the five exploration tenements that it holds.

7.4 The preferred valuation methodology used to value the shares of South Pacific is the Net Asset method. In order to determine the Net Asset value of South Pacific, we have commissioned an independent technical expert, CSA, specialising in the valuation of resource assets, to provide a range of values for South Pacific’s oil and gas assets. The CSA report dated 2 October 2019 is appended to this report as Appendix D.

7.5 As South Pacific is traded on the ASX, we have considered traded market prices as a secondary cross-check methodology only. A summary of the trading history of South Pacific shares on the ASX since 1 July 2018 is set out in Section 8.10.

Selected Primary Methodology – Takmur

7.6 In selecting an appropriate valuation methodology to value Takmur, for inclusion in the post-Transaction combined entity, we have considered the following factors:

- Takmur is not a listed entity, and therefore does not have a history of traded prices from which to derive a fair value.

- The Mandiri Project is considered to be at exploration stage and is only in very early stage production. As such, the earnings history is limited and future earnings potential is uncertain. Therefore, an FME valuation is not considered appropriate.
- We are not aware of any offers made for Takmur which have been made, and therefore an offer-based method is not relevant.
- Takmur is an asset holding company whose primary activity is its interest in the Mandiri Project.

Accordingly, we are of the opinion that the most appropriate valuation methodology to value Takmur is a Net Assets based approach. CSA's report also includes a valuation of the mineral resource and exploration potential of the Mandiri Project controlled by Takmur.

For personal use only

8. VALUATION OF SOUTH PACIFIC SHARES

Net Asset Valuation of South Pacific Shares

- 8.1 We have assessed the fair market value of a South Pacific share using a Net Asset approach. Set out below is South Pacific's adjusted net assets as at 30 September 2019. The value of South Pacific's existing oil and gas interests is considered to be negligible, as assessed by CSA and described in Sections 8.5 to 8.8. Accordingly, we have assumed the value of these interests to be nil for the purpose of our valuation. The fair market value of South Pacific has been assessed on a control basis.

	Ref	Adjusted 30 Sept 2019 \$US
Assets		
Current Assets		
Cash and cash equivalents		3,258
Trade and other receivables		10,062
Total Current Assets		13,320
Non-Current Assets		
Rental bond		35,065
Exploration assets		-
Plant & equipment		454
Total Non-Current Assets		35,519
Total Assets		48,840
Liabilities		
Current Liabilities		
Trade and other payables	5.5	(209,743)
Borrowings	5.5	(62,503)
Total Current Liabilities		(272,247)
Total Liabilities		(272,247)
Net Assets/(Liabilities)		(223,407)
Number of shares on issue (post consolidation basis) ('000)		18,285
Value per SPB Share - Control Basis (\$)		(0.0122)

- 8.2 As there is no intention to wind up the Company, we have not considered wind up values for the purposes of this report. We have been advised that South Pacific has not been involved in any significant (material) transactions subsequent to 11 November 2019 not already referred to in this report or disclosed via ASX announcements.
- 8.3 On a Net Asset basis using CSA's assessed negligible value of South Pacific's existing oil and gas interests, South Pacific's shares (on a post consolidation basis) may theoretically be considered to be negative \$0.0122, on a control basis. As the shares of South Pacific are on a limited liability basis, the value can reasonably be assumed to be nil for the purpose of this valuation.

Premium for Control

- 8.4 A premium for control can be defined as an amount or a percentage by which the pro-rata value of a controlling interest exceeds the pro-rata value of a non-controlling interest in a business enterprise, to reflect the power of control. The requirement for an explicit valuation adjustment for a control premium depends on the valuation methodology and approach adopted. This valuation is based on the net assets approach, which is premised on the ability to control the assets of an entity and therefore incorporates any relevant premium for control. Accordingly, no further adjustment is required, and in the case of a theoretical negative value per share, is meaningless.

CSA Valuation of South Pacific's Existing Hydrocarbon Interests

- 8.5 SIS engaged CSA to prepare an Independent Technical and Valuation Report including the existing hydrocarbon assets of South Pacific.
- 8.6 CSA's opinion is that South Pacific's existing oil and gas related interests have negligible value for the following reasons:
- the prospects are at a very early stage;
 - exploration results to date have not been encouraging;
 - there is uncertainty over the tenure of the interests; and
 - the consideration being paid for the oil and gas assets is \$1, and that this is not a related party transaction. We have no reason to believe that this is not an arms-length transaction.
- 8.7 We also note that South Pacific currently does not have sufficient funding to advance exploration work on the prospects, nor the intention of raising funds to do so.
- 8.8 Accordingly, we consider the value of South Pacific's existing PNG based oil and gas assets can reasonably be considered to not be materially different from nil for the purpose of the valuation.

South Pacific Share Trading History

- 8.9 In addition to the Net Asset valuation of South Pacific's shares discussed above, we have considered the recent trading history of South Pacific shares on the ASX.
- 8.10 Set out below is a summary of the traded share prices of South Pacific on the ASX from 1 July 2018 to 11 November. The Transaction was announced by South Pacific on 7 August 2019.

Month	High A\$	Low A\$	Last A\$	VWAP A\$	Volume	Volume/ weighted average ordinary shares
Jul-18	0.006	0.005	0.005	0.005	989,543	0.3%
Aug-18	0.011	0.006	0.008	0.008	1,866,377	0.5%
Sep-18	0.005	0.005	0.005	0.005	900	0.0%
Oct-18	0.01	0.005	0.009	0.006	611,800	0.2%
Nov-18	0.007	0.005	0.007	0.006	1,152,600	0.3%
Dec-18	0.008	0.007	0.007	0.008	490,200	0.1%
Jan-19	0.007	0.004	0.007	0.005	728,524	0.2%
Feb-19	0.006	0.005	0.005	0.005	23,475	0.0%
Mar-19	0.005	0.005	0.005	0.005	79,808	0.0%
Apr-19	0.006	0.004	0.006	0.005	995,781	0.3%
May-19	0.004	0.003	0.003	0.004	305,886	0.1%
Jun-19	0.003	0.002	0.002	0.002	2,365,263	0.6%
Jul-19	0.008	0.002	0.008	0.005	4,068,543	1.1%
Aug-19	-	-	0.008	N/A	-	0.0%
Sep-19	-	-	0.008	N/A	-	0.0%
Oct-19	-	-	0.008	N/A	-	0.0%
Nov-19	-	-	0.008	N/A	-	0.0%
Total	0.011	0.002	0.008	0.005	13,678,700	3.7%

- 8.11 We note that there has been no share trading activity since 30 July 2019 when trading in South Pacific shares on the ASX was suspended due to the pending announcement of the Transaction, and will not recommence until after the proposed Transaction has been resolved.



Pre/Post Announcement		A\$
Pre-Announcement	1 month VWAP	0.005
	3 month VWAP	0.004
	12 month volatility	225%
Post Announcement		Trading Suspended

8.12 Generally, the market is a fair indicator of what a share is worth, however in order for a quoted market price to be a reliable indicator of a company's value, the company's shares must demonstrate liquidity representative of an efficient market.

8.13 Liquidity in South Pacific shares is considered to be very low. A "deep" market is considered to be where the number of shares traded on a weekly basis exceeds 1% of the company's total shares. South Pacific's shares' liquidity was consistently well below this level in the 12 months preceding the announcement of the Transaction. We also note that South Pacific's shares are fairly tightly held with top 20 shareholders holding 81.1% of South Pacific shares as at 6 September 2019.

8.14 Accordingly, whilst we have considered the traded share price history as a secondary methodology, this has not influenced our assessment of value for the purpose of opining on the fairness the Transaction.

8.15 The future value of a South Pacific share will depend upon, inter alia:

- the successful exploitation of the mineral assets of South Pacific;
- the state of commodity markets;
- the cash position of South Pacific;
- the state of Australian and overseas stock markets;
- membership and control of the board and management of South Pacific; and
- liquidity of shares in South Pacific.

Conclusion on the Value of South Pacific Shares

8.16 In Sections 8.1 to 8.15 we have discussed the Net Asset value and recent ASX trading history of South Pacific shares.

8.17 **For the purpose of this report it is considered appropriate to use a Net Asset based value for South Pacific shares. Accordingly, we have assessed the value of South Pacific shares on a control interest basis to be nil.**

Reconciliation of Technical Value to Traded Share Prices

8.18 We note the material difference between traded prices and the assessed Net Asset based value of South Pacific shares. We also note it is not unusual for the market to price mineral exploration companies at significant discounts or premiums to appraised technical values due to various market factors. In addition to a low level of liquidity (which means trading in each stock is unlikely to represent an efficient market), of particular relevance for South Pacific is:

- current share market valuations and level of investor appetite for junior resource companies; and
- key people involved on the board and as shareholders, which can influence expectations that new value adding project opportunities will be brought to the Company.

- 8.19 Traded share prices are also considered to be more susceptible to short term fluctuations than a technical valuation which is based on longer term fundamental parameters.

For personal use only

9. VALUATION OF TAKMUR

Valuation of Takmur

- 9.1 The preferred valuation methodology used to value Takmur is the Net Asset method. The market value of Takmur's mineral assets have been assessed in the CSA Report, which we have relied on to arrive at a Net Asset based value of Takmur.

Adjusted Net Asset Based Value of Takmur

- 9.2 Set out below is Takmur's adjusted net assets as at 30 June 2019 assuming a going concern basis, presented in US dollars. The net assets have been calculated from the consolidated statement of financial position as outlined in Section 6.7. The low, preferred and high valuation figures reflect adjustments to the value of Takmur's mineral assets in accordance with the CSA Report as described in Section 9.17 and Takmur's 94.05% economic interest in the Mandiri Project.

	Ref	As at 30 June 2019 US\$	Low US\$	Preferred US\$	High US\$
Assets					
Current Assets					
Cash and cash equivalents	6.7	210,750	210,750	210,750	210,750
Trade and other receivables	6.7	202,718	202,718	202,718	202,718
Inventories	6.7	472,202	472,202	472,202	472,202
Other assets	6.7	120,594	120,594	120,594	120,594
Total current assets		1,006,264	1,006,264	1,006,264	1,006,264
Non-current assets					
Trade and other receivables	6.7	201,000	201,000	201,000	201,000
Property plant and equipment	6.7	681,584	681,584	681,584	681,584
Intangible assets	6.7	7,774	7,774	7,774	7,774
Mineral interests	6.7 / 9.17	-	7,750,000	15,250,000	22,750,000
Total non-current assets		890,358	8,640,358	16,140,358	23,640,358
Total assets		1,896,622	9,646,622	17,146,622	24,646,622
Liabilities					
Current liabilities					
Trade and other payables	6.7	(600,874)	(600,874)	(600,874)	(600,874)
Lease liabilities	6.7	(43,594)	(43,594)	(43,594)	(43,594)
Current tax liabilities	6.7	(212,826)	(212,826)	(212,826)	(212,826)
Total current liabilities		(857,294)	(857,294)	(857,294)	(857,294)
Non-current liabilities					
Lease liabilities	6.7	(42,557)	(42,557)	(42,557)	(42,557)
Total non-current liabilities		(42,557)	(42,557)	(42,557)	(42,557)
Total liabilities		(899,851)	(899,851)	(899,851)	(899,851)
Net assets		996,771	8,746,771	16,246,771	23,746,771
Outside equity interests (%)	9.24		5.95%	5.95%	5.95%
Outside equity interests (US\$)			(520,433)	(966,683)	(1,412,933)
Takmur's economic interest (%)			94.05%	94.05%	94.05%
Takmur's economic interest (US\$)			8,226,338	15,280,088	22,333,838

- 9.3 On a Net Assets basis using market values for Takmur's mineral interests in accordance with the CSA Report, a 100% equity interest in Takmur, which in turn holds a 94.05% interest in the Mandiri Project, may be worth between US\$8,226,338 and US\$22,333,838 with a preferred value of US\$15,280,088.

CSA Valuation of Takmur's Mineral Interests

- 9.4 CSA's Independent Technical and Valuation Report also included a technical assessment and valuation of the mineral interests of the Mandiri project.
- 9.5 In preparing their report, CSA sourced data and referenced the previous technical assessment report prepared by Continental Resource Management Pty Ltd ("CRM") which is attached to CSA's Independent Technical and Valuation Report. We note CSA's review included discussions with CRM and that CSA conducted their own site visit to the Mandiri Project.

- 9.6 CSA make the following key observations in their report:

(a) CSA consider the Mandiri Project is early to advanced stage exploration, with a maiden inferred mineral resource estimated recently. The mineral resource is assessed as being at the lower end of the inferred category. This is primarily because of the small number of drill holes that have defined the mineralisation (see CSA Report for additional discussion). To upgrade the resource to indicated, in CSA's view would require further exploration drilling in greater density, as well as significant improvements in the quality of samples, the compositing of samples, the number of composites submitted for analysis, the analysis methods, and the gradient modelling methods.

(b) The below tables set out the way in which the mineral resource has been defined.

Area	Category	Tonnage (Mt)	Total heavy minerals	Slimes (%)	Oversize (%)
Mandiri	Inferred	126	7	9	16

Component	Tonnage (Mt)	Heavy minerals (%)	Zircon (%)	Ilmenite (%)	Rutile (%)	Other (%)
Relative %	126	7	68	9.5	8.5	1

Component	Zircon	Ilmenite	Rutile	Other	Waste + H2O	Total material
Contained material	6.0 Mt	0.8 Mt	0.7 Mt	0.1 Mt	1.1 Mt	8.8 Mt

- (c) CSA note that the company's exploration target is below the mineral resource, and concur there is significant opportunity to increase the size of the resource by deeper drilling below the water table, which is yet to be meaningfully explored. CSA also concur that there is exploration potential between the margins of the current resource and the tenement boundary.
- (d) The existing licence currently only covers zircon and accordingly their valuation only includes the zircon material. CSA note the presence of other commodities, including gold, have been identified on the Mandiri tenement and a license extension presents upside opportunity.

Valuation of Mineral Resource

- 9.7 The Mandiri Project was valued by CSA assuming a 100% ownership basis, and all valuations are in US dollars. Only the value that can be attributed to the zircon in the tenement was included, since under the current license this is the only material currently permitted to be mined or processed.
- 9.8 The primary methodology employed by CSA was the comparable transactions approach using a US\$ per tonne of contained material metric. CSA's review of comparable transaction evidence found no recent transactions which are entirely comparable, and therefore resources that were deemed analogous to the Mandiri Project in some way were used as the best available comparable evidence. These include those where zircon is a significant

component, or those with mineral sands where zircon is one of several minerals that occur. Transactions assessed were those that occurred post January 2014, and for which there is sufficient public information on the transaction and project details. The valuation metrics implied by the relevant transactions were converted to US dollars at the prevailing exchange rate on the date of transaction announcement.

9.9 We note the CSA's comments on page 50 of their report which explain their approach and judgement applied in valuing the only the zircon component of the Mandiri Project, but using comparable transaction metrics across projects which involve a blend of mineral sand types.

9.10 Set out below is the mineral resource values derived by CSA for the zircon mineral resource.

Contained HM (Mt)	Factors (US\$/t)			Value (US\$m)		
	Low	High	Preferred	Low	High	Preferred
8.82	0.14	4.5	1.65	1.23	39.69	14.55

9.11 We note that given the limited number of comparable transaction evidence, there is a wide range of variability in the transaction metrics evident, which drives a wide range of potential values and therefore indicates a lower degree of uncertainty than a narrower range derived from greater available market evidence. However, we do not believe this has a material impact on our fairness conclusion given the pre-Transaction value of a South Pacific share is considered to be nil.

Valuation of Exploration Potential

9.12 CSA also utilised a comparable transaction approach to derive a value for Takmur's exploration target.

9.13 The implied range of mineral sands from the exploration target had a 0.5 risk factor applied, to account for the fact that the exploration target is not a mineral resource, and therefore a higher risk profile.

9.14 Set out below is the valuation of the mineral sands exploration target.

Low contained HM (Mt)	High contained HM (Mt)	Valuation factor (US\$/t)	Risk factor	Value (US\$m)		
				Low	High	Preferred
1.00	2.10	1.65	0.50	0.83	1.73	1.28

Secondary Methodology Cross-Checks

Mineral Resource

9.15 CSA used the yardstick method as a non-corroborative order of magnitude check for the zircon mineral resource. This involves applying a rule of thumb percentage factor based on the stage of the project, to the value of the contained zircon material in the resource, using the current spot price of zircon of US\$1,522/t¹. Using professional judgement CSA selected 0.1% and 0.2% of the spot price of US\$/t, which provided a valuation that is reasonable. The result is set out below.

Contained zircon (Mt)	Spot price (US\$/t)	Yardstick factors (% of spot price)		Value (US\$m)		
		Low	High	Low	High	Preferred
6.0	1,522	0.1	0.2	9.1	18.3	13.7

Exploration Target

- 9.16 CSA used the geological risk method as a cross check for the exploration target. The geological risk method discounts the target value for the project at a later stage of development based on the probability of that stage being achieved from the current stage, taking into account the cost. The preferred US\$/t value for the contained resource was used, with the result as set out below. This provided a cross-check that supported the primary methodology.

¹As reported by Iluka (2019)

Target contained HM (Mt)		Current Value		
Low	High	Low US\$m	High US\$m	Preferred US\$m
1.00	2.10	0.67	1.72	1.19

Valuation Summary

- 9.17 CSA applied professional judgement in considering the valuation analysis outlined above. A range of 50% above and below the calculated preferred value was used to provide a more meaningful range than the very wide range indicated by the analysis. The final CSA assessed valuations for the Mandiri Project minerals are set out below.

Mineral Assets	Low US\$	Preferred US\$	High US\$
Mineral resource	7,000,000	14,000,000	21,000,000
Exploration target	750,000	1,250,000	1,750,000
Total	7,750,000	15,250,000	22,750,000

Valuation of Takmur Processing Plant

- 9.18 The Mandiri Project includes a mineral sands processing plant, as is legally required to obtain a mineral export permit from the Government of Indonesia. The processing plant was not valued by CSA, though we note that a representative of CSA conducted a site visit and inspected the plant in the preparation of their report.
- 9.19 As the plant is currently small scale, simplistic in nature, and most of the equipment has recently been acquired, in our view the audit reviewed balance sheet figures (refer 9.2) provide sufficient accuracy for the purpose of our Net Asset based methodology, and accordingly we have adopted the audit reviewed value of property plant and equipment of \$681,584 as at 30 June 2019 for the purpose of our Net Asset valuation.
- 9.20 In arriving at this opinion, we reviewed:
- the fixed asset register of Mandiri as at 30 June 2019;
 - invoices dated between 6 December 2014 and 15 January 2016 for some of the fixed asset items of Mandiri; and
 - invoices dated between 13 May 2016 and 19 July 2018 of similar equipment to provide comparative support for the replacement value of some of the equipment.
- 9.21 The table below provides a breakdown of the audit reviewed fixed asset balances as at 30 June 2019.

Fixed Assets	Cost US\$	Accumulated depreciation US\$	Written down value US\$
Freehold land	45,966	-	45,966
Factory buildings	525,398	(91,945)	433,453
Construction WIP	45,242	-	45,242
Machinery & equipment	83,653	(49,079)	34,574
Motor vehicles	155,164	(35,397)	119,767
Other	5,073	(2,491)	2,582
Total	860,496	(178,912)	681,584

Economic Interest Due to Nature of Operational and Management Contract

- 9.22 As set out in Section 2.10, Takmur has an interest in Mandiri through its 99% owned subsidiary, PT AUM.
- 9.23 As of 24 January 2019, PT AUM entered into an exclusive Operation and Management Contract with Mandiri, under which PT AUM will provide mining equipment, technical and management expertise in order to develop the Mandiri Project. Under the terms of the agreement, Mandiri and its shareholders have delegated to PT AUM:
- the power to determine the financial and operational policy of Mandiri;
 - the right to appoint the majority of Mandiri directors; and
 - the right to receive 95% of Mandiri's net profit on an annual basis as compensation for the services provided to Mandiri.
- 9.24 This agreement in effect gives PT AUM a 95% economic interest in Mandiri, and therefore Takmur has a 94.05% interest in the profits of Mandiri through its subsidiary.
- 9.25 We note a key term of the Operation and Management Contract is a commitment by the Company to spend at least US\$ 15 million on mining equipment; other capital expenditures; exploration and geology studies; operational and administrative best practices; and management and other consulting services.
- 9.26 As Takmur has a 94.05% economic interest in the profits of Mandiri, we have included 94.05% of the assessed value of Mandiri in assessing the fair market value of Takmur. Additional balances directly held in the Takmur and PT AUM entities are immaterial.

10. EVALUATION OF FAIRNESS AND REASONABLENESS

Fairness Evaluation

10.1 In order to assess whether the proposed Transaction is fair in accordance with RG111, we have compared our assessed fair market values of:

- a South Pacific share before the proposed Transaction on a control basis (i.e. including a control premium); with
- a share in the resultant combined entity post-Transaction on a minority interest basis.

10.2 We have used a post 20 for 1 consolidation basis for the above two scenarios to ensure consistency.

Fairness Opinion

10.3 Our assessed value of a South Pacific share pre-Transaction on a control basis (refer Section 8.1) is as follows:

	Ref	Value \$US
Net assets/(liabilities) of the Company	5.5	(223,407)
Number of shares on issue (post consolidation basis) ('000)	4.4	18,285
Value per South Pacific Share - Control Basis (\$US)	8.1	(0.0122)

10.4 The shares of South Pacific on a control basis can therefore reasonably be assumed to be nil.

10.5 Note that we have not included the value of the existing options since they are out of the money and have negligible value.

10.6 Our assessed value per South Pacific share post-Transaction on a minority basis is as follows:

		Low	Preferred	High
	Ref	\$US	\$US	\$US
Existing net assets/(liabilities) of the Company	5.5	(223,407)	(223,407)	(223,407)
Value of Takmur interests acquired	9.2	8,226,338	15,280,088	22,333,838
Capital raising (net of transaction costs)		7,133,613	7,133,613	7,133,613
Net Assets/(Liabilities)		15,136,545	22,190,295	29,244,045
Number of ordinary shares on issue (post consolidation basis) ('000)	4.4	263,559	263,559	263,559
Value per South Pacific Share - Control Basis (\$US)		0.0574	0.0842	0.1110
Discount for minority interest basis	10.9	23.1%	23.1%	23.1%
Value per South Pacific Share - Minority Basis (\$US)		0.0442	0.0648	0.0854

- 10.7 We have assumed for the purpose of this valuation that the existing payables and borrowings will remain post-Transaction.

Discount for Minority Interest

- 10.8 We note a Net Asset valuation assumes a 100% interest in the company. Pre-Transaction the shares owned by Non-Associated Shareholders are considered on a control basis, whereas the shares owned by Non-Associated Shareholders will represent a minority interest post-Transaction (with Takmur vendors controlling up to 79.8% of the shares). Generally, historical evidence of control premiums offered on takeovers for small cap companies are in the range of 20% to 40%² (although outcomes outside this range are not uncommon) with 30% a commonly accepted benchmark.

- 10.9 To reflect the value of a minority interest in South Pacific shares to Non-Associated Shareholders post-Transaction, a minority interest discount of 23.1% (the inverse of a 30% control premium) is applied to the assessed value of a South Pacific share on a control basis.

Fairness Conclusion

- 10.10 The fair value of a share of the post-Transaction share of South Pacific as a combined entity may be in the range of US\$0.0442 and US\$0.0854, with a preferred value of US\$0.0648.
- 10.11 **Since the value of a South Pacific Share before the proposed Transaction (on a control basis) is below the value of the expected value of a South Pacific share post Transaction, the proposed Transaction is considered to be fair to Non-Associated Shareholders.**

²"Control Premium Study 2017", RSM

Reasonableness Evaluation

- 10.12 As per RG111.12, we have defined the proposed Transaction as reasonable if it is fair, or despite not being fair, there are sufficient reasons for shareholders to vote for the proposal. Whilst the proposed Transaction is fair, we have also considered the following advantages and disadvantages relating the proposed Transaction for the interests of shareholders.

Advantages

- The Transaction is considered fair.
- The Company, by increasing mineral prospects via the acquisition and associated capital raising, increases its opportunity for project and commercial success.
- Increases the relevance of the Company to ASX and investors.
- The Company may be able to raise further funds by way of new equity as a result of acquiring an interest in a development project. The raising of new capital may revitalise the Company and allow it to increase the value of the project.
- If the Transaction does not proceed, there is a risk the share price could fall.
- The Transaction may allow the Company to maintain its ASX listing and provide a liquid market for existing shareholders.
- If the Transaction does not proceed, there is a risk the Company may fall into administration and/or not maintain its ASX listing.
- Whilst the Mandiri Project currently is only licensed for mining of zircon, other commodities including gold have been identified and present upside opportunity.

Disadvantages

- Significant dilution of the Non-Associated Shareholders will occur, with ordinary shares representing up to a 93.1% interest in the Company to be issued as a result of the Transaction.
- Liquidity in the Company's shares may not increase significantly as there will be a consolidation, and a portion of the new shares issued to the vendors of Takmur will be subject to escrow.
- Exposure to country risk due to operations being based in Indonesia.
- Concentrated exposure to the price of zircon.
- The Company has the obligation to spend US\$15 million on the project and may be required to undertake a subsequent capital raising in order to fund this obligation.
- Completing this Transaction would eliminate the possibility of an alternative transaction to add to the business. However, it is not possible to assess whether any superior alternatives may eventuate.
- Other risks relating to the Mandiri Project have been outlined in the CSA Report in Appendix D.

Other Factors

- The Transaction will result in a change in nature and scale of the Company's activities from an oil and gas exploration company to mineral sands exploration and production. It will require the Company to re-comply with ASX's requirements for admission and quotation.

Opinion

- 10.13 We have considered the terms of the Transaction as outlined in the body of this report and have concluded that the Transaction is fair and reasonable to the Non-Associated Shareholders of South Pacific at the date of this report.

For personal use only

11. ADDITIONAL NOTES

Shareholders decision

- 11.1 SIS has been engaged to prepare an IER setting out whether in its opinion the Transaction is fair and reasonable and state reasons for that opinion. SIS has not been engaged to provide a recommendation to shareholders as to whether to approve the Transaction (and all other proposals under all resolutions).
- 11.2 The decision whether to approve the Transaction or not is a matter for individual shareholders based on each shareholder's views as to value, their expectations about future market conditions and their particular circumstances, including risk profile, liquidity preference, investment strategy, portfolio structure and tax position. If in any doubt as to the action they should take in relation to the Transaction proposal (and all other proposals under all resolutions), shareholders should consult their own professional adviser.
- 11.3 Similarly, it is a matter for individual shareholders as to whether to buy, hold or sell shares in South Pacific. This is an investment decision upon which SIS does not offer an opinion and is independent of the decision to approve the Transaction (and all other proposals under all resolutions), or not. Shareholders should consult their own professional adviser in this regard.

Sources of Information

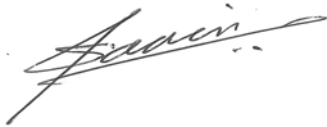
- 11.4 In making our assessment as to whether the Transaction is fair and reasonable to the Non-Associated Shareholders of South Pacific we have reviewed relevant published information and other unpublished information on the Company which is relevant to the current circumstances. In addition, we have held discussions with the management of South Pacific about the present and future operations of South Pacific. Statements and opinions contained in this report are given in good faith but in the preparation of this report, we have relied in part on information provided by the directors and management of South Pacific.
- 11.5 Information we have received includes, but is not limited to the following items.
- Discussions with representatives of South Pacific and CSA
 - Details of historical market trading of South Pacific shares as recorded by ASX to 11 November 2019
 - Shareholding details of South Pacific as at 6 September 2019 as noted in the 2019 Annual Report
 - Annual Report of South Pacific for the year ended 30 June 2019
 - Half Year Report of South Pacific for the half year ended 31 December 2018
 - Announcements made by South Pacific for the period from 1 January 2018 to 11 November 2019
 - The CSA Report on the resource assets of South Pacific and Takmur prepared by CSA and discussions with representatives from CSA
 - South Pacific's quarterly cash flow statements from 30 June 2018 to 30 June 2019
 - Management representation letter from Mandiri management
 - Audit reviewed Financial Report for Takmur Pte Ltd and its controlled entities for the half year to 30 June 2019

- CRM Technical Assessment Report
- Takmur's fixed asset register as at 30 June 2019
- Financial reports for Takmur, PT AUM and Mandiri for the year ended 31 December 2018
- Copies of mining contractor agreements with Mandiri
- Invoices of equipment purchased for the Mandiri processing plant
- Drafts of the Notice and EM
- A copy of the acquisition agreement between South Pacific and Takmur vendors
- A copy of the Operation and Management agreement between Mandiri and PT AUM
- Legal opinions relating to Mandiri's tenement and mining operations

11.6 Our report includes Appendix C, our declarations and Appendix D being the CSA Report.

Yours faithfully

STANTONS INTERNATIONAL SECURITIES PTY LTD
(Trading as Stantons International Securities)



Samir Tirodkar

Director

APPENDIX A

GLOSSARY

ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
CSA	CSA Global Pty Ltd
CRM	Continental Resource Management Pty Ltd
DCF	Discounted Cash Flows Method
EM	Explanatory Memorandum
FME	Capitalisation of Future Maintainable Earnings Method
IER	Independent Expert's Report
Mandiri	PT Investasi Mandiri
Mandiri Project	Mandiri Mineral Sands Project
Net Assets	Asset-Based valuation methodology
Non-Associated Shareholders	Shareholders not involved in the Transaction
Notice	Notice of Meeting
Operation and Management Contract	The operation and management contract of PT AUM with Mandiri
PNG	Papua New Guinea
PT AUM	PT Andary Usaha Makmur
RG74	ASIC Regulatory Guide 74: Acquisitions Approved by Members
RG111	ASIC Regulatory Guide 111: Content of Expert Reports
S606	Section 606 of the Corporations Act 2001
S611	Section 611 of the Corporations Act 2001
SIS	Stantons International Securities Pty Ltd
South Pacific	South Pacific Resources Limited
Takmur	Takmur Pte Ltd
The Company	South Pacific Resources Limited

APPENDIX B

VALUATION METHODOLOGIES

Introduction

In preparing this report we have considered several valuation approaches and methods. These approaches and methods are consistent with:

- Market practice
- The methods recommended by the Australian Securities and Investments Commission in Regulatory Guide 111
- The International Valuation Standards
- The International Glossary of Business Valuation Terms

A valuation approach is a general way of determining an estimate of value of a business, business ownership interest, security or intangible asset. Within each valuation approach there are a number of specific valuation methods, which are specific ways to determine an estimate of value.

There are three general valuation approaches as follows:

Income Approach

Provides an indication of value by converting future cash flows to a single present value. Examples of an income approach are:

- The discounted cash flow method (“**DCF**”)
- The capitalisation of future maintainable earnings method (“**FME**”)

Market Approach

Provides an indication of value by comparing the subject asset with identical or similar assets for which price information is available. The main examples of the market approach are:

- Comparable trading multiples
- Comparable transaction multiples
- Analysis of recent trading
- Industry rules of thumb

The first two methods are an application of the FME method.

Asset/Cost Approach

Provides an indication of value using the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility, whether by purchase or construction.

1. Discounted Cash Flow Method

Of the various methods noted above, the DCF method has the strongest theoretical basis. The DCF method estimates the value of a business by discounting expected future cash flows to a present value using an appropriate discount rate. A DCF valuation requires:

- A forecast of expected future cash flows
- An appropriate discount rate
- An estimate of terminal value

It is necessary to project cash flows over a suitable period of time (generally regarded as being at least five years) to arrive at the net cash flow in each period. For a finite life project or asset this would need to be done for the life of the project. This can be a difficult exercise requiring a significant number of

assumptions such as revenue and cost drivers, capital expenditure requirements, working capital movements and taxation.

The discount rate used represents the risk of achieving the projected future cash flows and the time value of money. The projected future cash flows are then valued in current day terms using the discount rate selected.

A terminal value reflects the value of cash flows that will arise beyond the explicit forecast period. This is commonly estimated using either a constant growth assumption or a multiple of earnings (as described under FME below). This terminal value is then discounted to current day terms and added to the net present value of the forecast cash flows to provide an estimate for the overall value of the business.

The DCF method is often sensitive to a number of key assumptions such as revenue growth, future margins, capital investment, terminal growth and the discount rate. All of these assumptions can be highly subjective, sometimes leading to a valuation conclusion presented that is too wide to be useful.

A DCF approach is usually preferred when valuing:

- Early stage companies or projects
- Limited life assets such as a mine or toll concession
- Companies where significant growth is expected in future cash flows
- Projects with volatile earnings

It may also be preferred if other methods are not suitable, for example if there is a lack of reliable evidence to support an FME approach. However, it may not be appropriate if:

- Reliable forecasts of cash flow are not available and cannot be determined
- There is an inadequate return on investment, in which case a higher value may be realised by liquidating the assets than through continuing the business

A DCF approach is not recommended when assets are expected to earn below the cost of capital. Also, when valuing a minority interest in a company, care needs to be taken if a DCF based on earnings for the whole business is prepared, as the holder of a minority interest would not have access to, or control of, those cash flows.

2. Capitalisation of Future Maintainable Earnings Method

The FME method is a commonly used valuation methodology that involves determining a future maintainable earnings figure for a business and multiplying that figure by an appropriate capitalisation multiple. This methodology is generally considered a short form of a DCF, where a single representative earnings figure is capitalised, rather than a stream of individual cash flows being discounted. The FME methodology involves the determination of:

- A level of future maintainable earnings
- An appropriate capitalisation rate or multiple

Any of the following measures of earnings can be used

Revenue – mostly used for early stage, fast growing companies that do not make a positive EBITDA or as a cross-check of a valuation conclusion derived using another method.

EBITDA – most appropriate where depreciation distorts earnings, for example in a company that has a significant level of depreciating assets but little ongoing capital expenditure requirement.

EBITA – in most cases EBITA will be more reliable than EBITDA as it takes account of the capital intensity of the business

EBIT – whilst commonly used in practice, multiples of EBITA are usually more reliable as they remove the impact of amortisation which is a non-cash accounting entry that does not reflect a need for future capital investment (unlike depreciation)

NPAT – relevant in valuing businesses where interest is a major part of the overall earnings of the group (e.g. financial services businesses such as banks).

Multiples of EBITDA, EBITA and EBIT are commonly used to value whole businesses for acquisition purposes where gearing is in the control of the acquirer. In contrast, NPAT (or P/E) multiples are often used for valuing minority interests in a company as the investor has no control over the level of debt.

A normalised level of maintainable earnings needs to be determined for the selected earnings measure. This excludes the impact of any gains or losses that are not expected to reoccur and allows for the full year impact of any changes (such as acquisitions or disposals) made part way through a given financial year.

The selected multiple to apply to maintainable earnings reflects expectations about future growth, risk and the time value of money captured in a single number. Multiples can be derived from three main sources.

- Using the comparable trading multiples, market multiples are derived from the trading prices of stocks of companies that are engaged in the same or similar lines of business that are actively traded on a free and open market, such as the ASX
- The comparable transactions method is a method whereby multiples are derived from transactions of significant interests in companies engaged in the same or similar lines of business.
- It is also possible to build a multiple from first principles based on an appropriate discount rate and growth expectations.

It is important to use the same earnings periods (historical, current or forecast) for calculating comparable multiples, as the period used for determining FME. For example, a multiple based on historical earnings of comparable companies should be applied to historical earnings of the subject of the valuation and not to forecast earnings.

The capitalisation of earnings method is widely used in practice. It is particularly appropriate for valuing companies with a relatively stable historical earnings pattern which is expected to continue. The method is less appropriate for valuing companies or assets if:

- There are no (or very few) suitable alternative listed companies or transaction benchmarks for comparison
- The asset has a limited life
- Future earnings or cash flows are expected to be volatile
- There are negative earnings or the earnings of a business are insufficient to justify a value exceeding the underlying net assets
- Working capital requirements are not expected to remain stable

3. Asset or Cost Approach

The asset approach to value is based on the assumption that the current value of all assets (tangible and intangible) less the current value of the liabilities should equate to the current value of the entity. Specifically, an asset approach is defined as a general way of determining a value indication of a business, business ownership interest, or security using one or more methods based on the value of the assets net of liabilities. A cost approach is defined as a general way of determining a value indication of an individual asset by quantifying the amount of money required to replace the future service capability of that asset.

The asset based valuation methods estimate the value of a company based on the realisable value of its net assets, less its liabilities. There are a number of asset based methods including:

- Orderly realisation
- Forced liquidation
- Net assets on a going concern
- Replacement cost

- Reproduction cost

The orderly realisation of assets method estimates fair market value by determining the amounts that would be distributed to shareholders, after payments of all liabilities including realisation costs and taxation charges that arise, assuming the company is wound up in an orderly manner. The forced liquidation method is similar to the orderly realisation of assets except the liquidation method assumes the assets are sold in a shorter time frame. Since wind up or liquidation of the company may not be contemplated, these methods in their strictest form may not necessarily be appropriate. The net assets on a going concern basis method estimates the fair market values of the net assets of a company but does not take account of realisation costs.

The asset/cost approach is generally used when the value of the business' assets exceeds the present value of the cash flows expected to be derived from the ongoing business operations, or the nature of the business is to hold or invest in assets. It is important to note that the asset approach may still be the relevant approach even if an asset is making a profit. If an asset is making less than the economic rate of return and there is no realistic prospect of it making an economic return in the foreseeable future, an asset/cost approach will be the most appropriate method.

An asset-based approach is a suitable method of valuation when:

- An enterprise is loss making and is not expected to become profitable in the foreseeable future
- Assets are employed profitably but earn less than the cost of capital
- A significant portion of the company's assets are composed of liquid assets or other investments (such as marketable securities and real estate investments)
- It is relatively easy to enter the industry (e.g. small machine shops and retail establishments)

Asset based methods are not appropriate if:

- The ownership interest being valued is not a controlling interest, has no ability to cause the sale of the company's assets and the major holders are not planning to sell the company's assets
- A business has (or is expected to have) an adequate return on capital, such that the value of its future income stream exceeds the value of its assets

An asset based approach is often considered as a floor value for a business assuming the business has the option to realise all of its assets and liabilities.

4. Analysis of Recent Trading

The most recent share trading history provides evidence of the fair market value of the shares in a company where they are publicly traded in an informed and liquid market. There should also be some similarity between the size of the parcel of shares being valued and those being traded. Where a company's shares are publicly traded then an analysis of recent trading prices should be considered, at least as a cross-check to other valuation methods.

5. Industry Specific Rule of Thumb

Industry specific rules of thumb are used in certain industries. These methods typically involve a multiple of an operating figure such as traffic for internet businesses or number of beds for a nursing home. These methods are typically fairly crude and therefore only appropriate as a cross-check to a valuation determined by an alternative method.

Selecting an Appropriate Valuation Approach and Method

The choice of an appropriate valuation approach and methodology is subjective and depends on several factors such as whether a methodology is prescribed, the company's historical and projected financial performance, stage of maturity, the nature of the company's operations and availability of information. The selection of an appropriate valuation method should be guided by the actual practices adopted by potential acquirers of the company involved and the information available.

APPENDIX C

AUTHOR INDEPENDENCE AND INDEMNITY

This annexure forms part of and should be read in conjunction with the report of Stantons International Securities Pty Ltd trading as Stantons International Securities dated 11 November 2019, relating to the proposed Transaction.

At the date of this report, Stantons International Securities does not have any interest in the outcome of the proposal. There are no relationships with South Pacific other than Stanton International Securities acting as an independent expert for the purposes of this report. Stantons International Audit and Consulting Pty Ltd ("SIAC") (the parent entity of Stantons International Securities) and Stantons International Securities undertook an independence assessment and considered that there are no existing relationships between Stantons International Securities and the parties participating in the transaction detailed in this report which would affect our ability to provide an independent opinion. The fee to be received for the preparation of this report is expected to be A\$35,000 exclusive of GST. The fee is payable regardless of the outcome. With the exception of that fee, neither Stantons International Securities nor Mr Samir Tirodkar have received, nor will or may they receive any pecuniary or other benefits, whether directly or indirectly for or in connection with the preparation of this report.

Stantons International Securities does not hold any securities in South Pacific. There are no pecuniary or other interests of Stantons International Securities that could be reasonably argued as affecting its ability to give an unbiased and independent opinion in relation to the proposal. Stantons International Securities and Mr Samir Tirodkar have consented to the inclusion of this report in the form and context in which it is included.

QUALIFICATIONS

We advise Stantons International Securities Pty Ltd is the holder of an Australian Financial Services License (No 448697) under the Corporations Act relating to advice and reporting on mergers, takeovers and acquisitions involving securities. Stantons International Securities Pty Ltd has extensive experience in providing advice pertaining to mergers, acquisitions and strategic and financial planning for both listed and unlisted businesses.

Mr Samir Tirodkar, the person responsible for the preparation of this report, has experience in the preparation of valuations for companies, particularly in the context of listed company corporate transactions, including the fairness and reasonableness of such transactions. The professionals employed in the research, analysis and evaluation leading to the formulation of opinions contained in this report, have qualifications and experience appropriate to the tasks they have performed.

DECLARATION

This report has been prepared at the request of South Pacific in order to assist shareholders of South Pacific to assess the merits of the Transaction to which this report relates. This report has been prepared for the benefit of South Pacific shareholders and those persons only who are entitled to receive a copy for the purposes under the Corporations Act 2001 and does not provide a general expression of Stantons International Securities' opinion as to the longer-term value of South Pacific, its subsidiaries and/or assets. Stantons International Securities does not imply, and it should not be construed, that it has carried out any form of audit on the accounting or other records of South Pacific or their subsidiaries, businesses, other assets and liabilities. Neither the whole, nor any part of this report, nor any reference thereto, may be included in or with or attached to any document, circular, resolution, letter or statement, without the prior written consent of Stantons International Securities to the form and context in which it appears.

DISCLAIMER

This report has been prepared by Stantons International Securities with care and diligence. However, except for those responsibilities which by law cannot be excluded, no responsibility arising in any way whatsoever for errors or omission (including responsibility to any person for negligence) is assumed

by Stantons International Securities (and SIAC, its directors, employees or consultants) for the preparation of this report.

DECLARATION AND INDEMNITY

Recognising that Stantons International Securities may rely on information provided by South Pacific and its officers (save whether it would not be reasonable to rely on the information having regard to Stantons International Securities experience and qualifications), South Pacific has agreed:

- (a) to make no claim by it or its officers against Stantons International Securities (and SIAC) to recover any loss or damage which South Pacific may suffer as a result of reasonable reliance by Stantons International Securities on the information provided by South Pacific; and
- (b) to indemnify Stantons International Securities against any claim arising (wholly or in part) from South Pacific, or any of its officers, providing Stantons International Securities with any false or misleading information or in the failure of South Pacific or its officers in providing material information, except where the claim has arisen as a result of wilful misconduct or negligence by Stantons International Securities.

A final draft of this report was presented to South Pacific for a review of factual information contained in the report. Comments received relating to factual matters were taken into account, however the valuation methodologies and conclusions did not change.

APPENDIX D

**CSA GLOBAL PTY LTD INDEPENDENT TECHNICAL SPECIALISTS' REPORT (CSA REPORT) ON
SOUTH PACIFIC RESOURCES LIMITED AND TAKMUR'S RESOURCE ASSETS DATED 2
OCTOBER 2019**

For personal use only



CSA Global
Mining Industry Consultants

Independent Technical Specialists' Report

Technical Assessment and Valuation of the Mineral Assets of South Pacific Resources Limited

**CSA Global Report Nº R416.2019
2 October 2019**

www.csaglobal.com

Report prepared for

Client Name	Stantons International Securities Pty Ltd
Project Name/Job Code	SPBITV01
Contact Name	James Turnbull
Contact Title	Director
Office Address	Level 2, 1 Walker Avenue, West Perth, WA 6005

Report issued by

CSA Global Office	CSA Global Pty Ltd Level 2, 3 Ord Street West Perth, WA 6005 P.O. Box 141 West Perth, WA 6872 AUSTRALIA
Division	Corporate

Report information

File name	R416.2019 SPBITV01 Mandiri HMS ITSR Final
Last edited	11/11/2019 11:56:00 AM
Report Status	Final

Authors and Authorisation Signatures

Coordinating Author	Trivindren Naidoo MSc, Grad Cert, MAusIMM, FGSSA, Pr.Sci.Nat	Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.
Contributing Author	Robert Holm Ph.D, P.G.Dip., MAIG, MAAPG	Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.
Peer Reviewer	Sam Ulrich BSc (Hons), GDipAppFinInv, MAusIMM, MAIG, FFin	Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.
CSA Global Authorisation	Graham Jeffress BSc (Hons), RPGeo, FAIG, FAusIMM, FSEG, MGSA	Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication. Electronic signature not for duplication.

© Copyright 2019

Executive Summary

CSA Global Pty Ltd (CSA Global) was commissioned by Stantons International Securities Pty Ltd (Stantons) to prepare an Independent Technical Specialists' Report on the Indonesian mineral assets, and Papua New Guinean petroleum assets (the "Assets") of South Pacific Resources Limited (ASX: SPB or "the Company").

In August 2019, the Company announced its intention to acquire 100% of Takmur Pte Ltd, which has exclusive rights to the operation and management of a mineral sands tenement and production facility, the Mandiri Project, in Indonesia. SPB engaged Stantons to prepare an Independent Experts Report (IER) for inclusion within a Notice of Meeting to be sent to the shareholders of the Company.

Stantons has in turn commissioned CSA Global Pty Ltd (CSA Global) to prepare an independent technical assessment and valuation of the mineral and petroleum assets of the Company (an Independent Technical Specialists' Report, the "Report") for inclusion in the IER. The Report, or a summary of it, is to be appended to the IER, and as such, will become a public document. The Report has been compiled in accordance with the VALMIN Code.

The Report provides a review of the material mineral and petroleum assets of SPB, being the Mandiri Zircon Project in Kalimantan, and oil and gas tenure in Papua New Guinea, and provides a technical valuation of these Assets. The basis of value assumed in respect of the Mineral Assets is 'market value' as defined in the VALMIN Code (2015). We consider market value to be consistent with the concept of 'fair value' as described in ASIC's Regulatory Guide 111 – Content of Expert Reports. CSA Global has used a range of valuation methodologies to reach a conclusion on the value of the Assets. Note that the valuation is of the Mineral Assets and not of the value of SPB as a company.

The statements and opinions contained in this Report are given in good faith and in the belief that they are not false or misleading. The conclusions are based on the reference date of 25 September 2019 and could alter over time depending on exploration results, mineral prices and other relevant market factors.

CSA Global's valuations are based on information provided by SPB, and public domain information, which are detailed within body of the report. CSA Global has endeavoured, by making all reasonable enquiries within the timeframe available, to confirm the authenticity and completeness of the technical data upon which this Report is based. No audit of any financial data has been conducted.

The valuations discussed in this Report have been prepared at a valuation date of 25 September 2019. It is stressed that the values are opinions as to likely values, not absolute values, which can only be tested by going to the market.

Mandiri Project

The Mandiri Project comprises a single tenement covering 2,035 ha, as well as an established small heavy mineral processing plant.

CSA Global consider that the Mandiri heavy mineral sands (HMS) Project is an Advanced Exploration Project, as defined in the VALMIN Code, with a maiden Inferred Mineral Resource recently prepared.

The Mandiri Tenement contains heavy mineral sand (HMS) mineralisation, hosted in Holocene age alluvium the product of an ancient Kahayan river channel and flood plain. The sediment is comprised mainly of unconsolidated sands and contains some 25% clay and silt. The area is geologically relatively simple with an alluvium layer generally of 2 to 6 m in thickness with some areas having up to 11 m in thickness. The alluvium bed overlies a Miocene age coal-bearing sequence called the Werukin Formation.

The Inferred Mineral Resources for the Mandiri HMS deposit are defined as 126 Mt containing 7% HM, 9% slimes and 16% oversize at a lower cut-off grade of 2%.

CSA Global consider that the Mandiri resource is a low confidence Inferred Mineral Resource, primarily because of the small number of drill holes which have defined the mineralisation, but also due to the quality of the sampling, the compositing of samples, the limited number of composites submitted for analysis, the analysis methods, and the lack of mineral assemblage analytical work.

In combination these factors are all considered to reduce the confidence in Mineral Resource reporting. Significant improvements in each of these areas will be required to report to the level of Indicated Mineral Resources, along with significantly increased drill density.

An Exploration Target of 25 to 30 Mt at 4% to 7% HM has been established for the Mandiri Project, below the Inferred Mineral Resource. The potential quantity and grade of this Exploration Target is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

SPB have defined an exploration target below the Mineral Resource. CSA Global concur that there is significant opportunity to increase the size of the resource by deeper drilling. This will require mechanised aircore drilling techniques to penetrate the water table and obtain sample from the water saturated alluvial deposits is at depth.

SPB have identified exploration potential between the margins of the current mineral resource and the tenement boundary, and CSA Global concur that this area has potential to increase the size of the resource.

The deposit is currently being exploited through small-scale mining activity, with effective mineral processing occurring at SPB's mineral processing facility located nearby. This provides strong support for the potential of the deposit for eventual economic development.

CSA Global consider that further exploration and development studies of the Mandiri heavy mineral sands project is warranted.

PNG Oil and Gas Licences

SPB is the 100% holder of five conventional petroleum prospecting licences in Papua New Guinea. PPL 366 (Biwai) and 367 (Turama) are located onshore in the Gulf of Papua, PPL 356 (Dibiri) and 357 (Hiri) offshore in the Gulf of Papua, and PPL 358 (Cape Vogel) is in the frontier Cape Vogel Basin. Acquisition of the five petroleum prospecting licences from Indo Pacific Energy Pty Ltd ("IPE") and its subsidiary Coral Sea Petroleum (PNG) Limited ("CSP (PNG)") was completed by SPB on 3 August 2012. CSA Global cannot confirm the status of tenure and it is unclear if SPB retains any rights to these PPLs.

The work to date on the five PPLs is considered very early exploration activity and has comprised the development of conceptual petroleum plays and leads based on open-file data; only limited de-risking work has been carried out on these models. Historic exploration data exists on a regional scale for all licences. The offshore Gulf of Papua PPLs (356, 357) and PPL 358 are covered by widely spaced open-file seismic data with historic wells sufficiently close to test relevant petroleum systems; the onshore Gulf of Papua PPLs (366 and 367) are covered by historic seismic data and previous wells have been drilled within the permit area. Where historic exploration drilling exists in the vicinity of the proposed leads, results have not been favourable and were not followed up with subsequent work. Additional modern multi-client seismic data exists for the offshore PPLs, however, there is no public record for purchase of this data by SPB.

Up to the year ending 30 June 2013 SPB reported it had completed gathering all available open-file well, seismic and other data in all five of its PPLs. SPB also reported at this time that it had conducted a regional interpretation based on this data and had completed regional Gross Depositional Environment and Common Risk Segment maps for PPLs 356, 357, 366 and 367. SPB has not reported carrying out any data acquisition activities on any of the five PPLs, including but not limited to, commissioning of new geophysical surveys, acquisition of new seismic data, or having a material interest in the drilling of any wells.

The work to date on the five PPLs comprises development of conceptual petroleum plays and leads based on obtained open-file data and is considered very early exploration work. CSA Global considers that SPB's Papua New Guinea petroleum prospecting licences to be of low prospectivity for significant petroleum discoveries based on the work to date.

At the time of PPL acquisition, the work and expenditure program for each of the PPLs set out an indicated approved work and expenditure program/condition to be undertaken. This work program is outlined in the ASX release dated 29 May 2012 (Orchid Capital Ltd Prospectus, 29 May 2012). The lack of work carried out for each PPL suggests the work and expenditure program has not been met. CSA Global cannot confirm the status of tenure and it is unclear if SPB retains any rights to these PPLs.

Valuation

In forming an opinion on the Market Value of the Mandiri Tenements, the valuation approach adopted by CSA Global has been to rely primarily on Market-based methods (primarily the Comparative Transaction method). This was based on the declared Mineral Resources on the property.

In considering the likely value of the Mineral Resources, CSA Global has employed the Yardstick method as a non-corroborative order of magnitude crosscheck on the valuation derived using the Comparative Transactions method. In considering the likely value of the HMS Exploration Target, CSA Global has employed the Geological Risk method as a non-corroborative order of magnitude crosscheck on the valuation using the Comparative Transactions method.

CSA Global understands that the relevant licences (tenure and export) under which the Mandiri Project operates are restricted to zircon. CSA Global has therefore not assigned any value to heavy minerals other than zircon, including gold.

CSA Global's opinion on the likely market value of the Mandiri tenement, as at 25 September 2019, is presented in Table 1.

CSA Global stress that this is an opinion on value, and not an absolute value, which can only be tested by going to market.

Table 1: CSA Global opinion on likely market value of Mandiri tenement, as at 25 September 2019.

	Low (US\$ million)	High (US\$ million)	Preferred (US\$ million)
Mineral Resource	7.00	21.00	14.00
Exploration Target	0.75	1.75	1.25
Tenement Total	7.75	22.75	15.25

Values quoted on a 100% basis.

The valuation has been compiled to an appropriate level of precision and minor rounding errors may occur.

The preferred value for the Mineral Resource is consistent between the primary method and the order of magnitude crosscheck. This value has been adopted as the preferred value for the mineral resource. CSA Global has exercised professional judgement in selecting a valuation range of 50% above and below the preferred value, to yield a symmetrical range. CSA Global notes that this restricts the very wide range derived from the comparative transactions method to a more meaningful range, while still reflecting CSA Global's view on the risks associated with a very early stage Mineral Resource and a project still requiring substantial work to advance.

Likewise, the preferred value for the Exploration Target is consistent between the primary method and the order of magnitude crosscheck. This value has been adopted as the preferred value for the Exploration Target. CSA Global has exercised professional judgement in selecting a valuation range of 40% above and below the preferred value, to yield a symmetrical range. CSA Global notes that although this range is smaller than that applied to the value of the Mineral Resource above, it is consistent with the ranges derived in both valuation methods considered for the Exploration Target. CSA Global therefore considers a range of 40%

above and below a preferred value to be appropriate in assessing the likely value of a mineral asset at this early stage. A wider range such as 50% would lead to a valuation range greater than the informing methods and so was not appropriate.

On the basis of CSA Global's technical assessment of the PNG oil and gas tenements, the outcomes of which are summarised in Section 3.4, CSA Global concludes that the PNG petroleum assets of SPB currently have only negligible value, and the market value of these tenements are not likely to be material within the context of the post-transaction value of SPB as a whole.

For personal use only

Contents

Report prepared for	II
Report issued by.....	II
Report information.....	II
Authorisation Signature	II
EXECUTIVE SUMMARY.....	III
Mandiri Project.....	III
PNG Oil and Gas Licences	IV
Valuation	V
1 INTRODUCTION	10
1.1 Context, Scope and Terms of Reference	10
1.2 Compliance with the VALMIN and JORC Codes.....	10
1.3 Principal Sources of Information	11
1.4 Authors of the Report – Qualifications, Experience and Competence.....	11
1.5 Prior Association and Independence	13
1.6 Declarations.....	13
2 MANDIRI HEAVY MINERAL SANDS PROJECT	14
2.1 Background.....	14
2.1.1 Location and Access	14
2.1.2 Ownership and Tenure.....	15
2.1.3 Environment, social and culture factors.....	17
2.1.4 Topography and land use.....	18
2.2 Exploration History	19
2.3 Geology.....	19
2.3.1 Regional Geology.....	19
2.3.2 Local Geology	19
2.3.3 Deposit Geology	20
2.4 Mineral Resources	21
2.4.1 Data	21
2.4.2 Interpretation.....	24
2.4.3 Modelling	25
2.4.4 Classification and Reporting.....	27
2.4.5 Current Mining and Mineral Processing Activities	28
2.5 Exploration Potential.....	29
2.5.1 Exploration Target.....	29
2.5.2 Alluvial Gold Mineralisation	29
2.6 Summary and Discussion.....	29
3 PAPUA NEW GUINEA OIL AND GAS PROJECTS	31
3.1 Background.....	31
3.2 Exploration History	32
3.2.1 SPB Exploration Activities.....	32
3.2.2 Prior Exploration in PPL 356 & 357 – Offshore Gulf of Papua	32
3.2.3 Prior Exploration in PPL 358 – Offshore Cape Vogel Basin.....	32
3.2.4 Prior Exploration in PPL 366 & 367 – Onshore PNG	32
3.3 Geology and Prospectivity	36
3.3.1 PPL 356 & 357 – Offshore Gulf of Papua.....	36
3.3.2 PPL 358 – Offshore Cape Vogel Basin.....	38
3.3.3 PPL 366 & 367 – Onshore PNG	42
3.4 Summary and Discussion	45
4 RISKS.....	46
4.1 Mandiri Heavy Mineral Sands Project	46

4.2	Papua New Guinea Oil and Gas Projects	46
5	VALUATION OF INDONESIAN MINERAL ASSETS	47
5.1	Previous Valuations	47
5.2	Valuation Approach	47
5.3	Commodity Market and Pricing.....	48
5.4	Comparative Transactions	49
5.4.1	Value of the Exploration Target	50
5.5	Yardstick Crosscheck.....	51
5.6	Geological Risk Method	52
6	VALUATION OF PNG PETROLEUM ASSETS.....	54
7	VALUATION OPINION	55
8	REFERENCES.....	57
	South Pacific Resources Limited ASX Releases	58
9	GLOSSARY	59
10	ABBREVIATIONS AND UNITS OF MEASUREMENT	62
APPENDIX 1:	VALUATION APPROACHES	63
APPENDIX 2:	COMPARATIVE TRANSACTIONS	71

Figures

Figure 1:	Location of Mandiri Project in Kalimantan, Indonesia	14
Figure 2:	Access road and tracks to Mandiri project.....	15
Figure 3:	Mandiri tenement location map	18
Figure 4:	Local area (LHS) area disturbed by mining; (RHS) undisturbed area in the Mandiri Project	19
Figure 5:	Geological map of the Mandiri tenement area.....	20
Figure 6:	Heavy Mineral accumulations exposed in base of mining pit.....	21
Figure 7:	Map of the Mandiri HMS project showing auger hole locations	22
Figure 8:	Plan view of the Mandiri deposit block model and auger holes – THM grade	26
Figure 9:	Plan view of the Mandiri deposit block model and auger holes – deposit thickness	27
Figure 10:	Location of South Pacific Resources petroleum prospecting licences in PNG	31
Figure 11:	Sea floor map across Dibiri and Hiri Licences.....	33
Figure 12:	Well and seismic database (SPB) – Cape Vogel Licence	33
Figure 13:	Well cross section – Goodenough-1 to Nubiam-1	34
Figure 14:	Location of Biwai and Turama Licences	35
Figure 15:	Location map – Biwai and Turama Licences	35
Figure 16:	Stratigraphy of the Gulf of Papua region	37
Figure 17:	Regional seismic line showing a variety of play types in the Gulf of Papua.....	38
Figure 18:	Map of the Cape Vogel-Trobriand Basin area.....	40
Figure 19:	Correlation of stratigraphy of the Cape Vogel Basin.....	41
Figure 20:	Interpreted south-north seismic section	41
Figure 21:	Map showing total thickness of basin sediment in two-way travel time (ms)	42
Figure 22:	Top Toro seismic structure beneath PPLs 366 and 367.	44
Figure 23:	Interpreted seismic section across PPLs 366 and 367 (Line A-B in Figure 22).	44
Figure 24:	Turama (PPL 367) lead to Barikewa Field geological cross section.....	45
Figure 25:	Selected annual mineral sands prices	48
Figure 26:	Zircon price history	48
Figure 27:	Convex and Concave Minerals	52
Figure 28:	Valuation Range for the Mandiri Mineral Resource	55
Figure 29:	Valuation Range for the Mandiri Exploration Target	56

Tables

Table 1:	CSA Global opinion on likely market value of Mandiri tenement, as at 25 September 2019.	V
Table 2:	Mandiri license terms	16
Table 3:	Mandiri tenement coordinates	16
Table 4:	Drill hole and heavy mineral determination data used in the Mineral Resource estimation	23
Table 5:	Mineralogical composition of a high grade zircon concentrate from the Mandiri Tenement.....	24
Table 6:	Mineral Resource estimate for the Mandiri Project - THM	27
Table 7:	Mineral Resource estimate for the Mandiri Project - Mineral assemblage	27
Table 8:	Mineral assemblage and contained t of the components (unrounded)	28
Table 9:	Conventional petroleum prospecting licences held by SPB.	31
Table 10:	Valuation basis and methods employed	47
Table 11:	Analysis of transactions involving heavy mineral sands resources	49
Table 12:	Valuation of Inferred Mineral Resource considering Comparative Transactions	50
Table 13:	Valuation of HM Exploration Target considering Comparative Transactions	51
Table 14:	Order of Magnitude Crosscheck of Zircon Mineral Resource considering Yardstick method	52
Table 15:	Order of Magnitude Crosscheck of Exploration Target considering Geological Risk Method	53
Table 16:	CSA Global opinion on likely market value of Mandiri tenement, as at 25 September 2019.	55
Table 17:	PEM factors	65
Table 18:	Definition of exploration stages.....	66
Table 19:	Probability of successfully proceeding from one exploration stage to another	66
Table 20:	Valuation approaches for different types of mineral properties (VALMIN, 2015).....	68
Table 21:	Geoscientific Factor rankings	69
Table 22:	Summary of Comparative Transactions	71
Table 23:	Comparative Transactions analysed	72

1 Introduction

1.1 Context, Scope and Terms of Reference

South Pacific Resources Ltd (SPB or “the Company”) is a junior oil and gas exploration company listed on the Australian Securities Exchange (ASX) which currently holds five oil and gas prospecting tenements in Papua New Guinea (PNG). Takmur Pte. Ltd. (Takmur) is a Singapore-based company that has exclusive rights to the operation and management of a mineral sands tenement and production facility in Indonesia. The petroleum and mineral assets (together, the “Assets”) are the subject of this report.

On 7 August 2019 SPB announced that it has signed a Sale and Purchase Agreement to acquire 100% of Takmur Pte Ltd. The transaction terms are outlined in the Company’s ASX Announcement dated 7 August 2019, and include a share consolidation, capital raising and changing the Company’s name. The Company also announced that it had entered into an agreement with Ana and Bella Pty Ltd to sell its Papua New Guinea assets, subject to shareholder approval and the Transaction completing.

As part of the transaction SPB will seek shareholders’ approval to perform:

- a 20 to 1 share consolidation;
- a capital raising of AUD \$14 million under a prospectus (Capital Raising); and,
- a change in activities under the Listing Rules.

The Company has engaged Stantons International Securities Pty Ltd (Stantons) to prepare an Independent Experts Report (IER) for inclusion within a Notice of Meeting (NOM) to be sent to shareholders of the Company.

Stantons has in turn commissioned CSA Global Pty Ltd (CSA Global) to prepare an independent technical assessment and valuation of the Assets of the Company (an Independent Technical Specialists’ Report, the “Report”) for inclusion in the IER. The Report, or a summary of it, is to be appended to the IER, and as such, will become a public document.

The Report will address the following scope of work:

- a market valuation of the Mandiri Tenement to be acquired by SPB;
- an opinion on whether or not SPB’s oil and gas tenure in Papua New Guinea is likely to have a material value, and if material, a market value of those assets.

The heavy mineral processing plant is excluded from CSA Global’s scope of work.

1.2 Compliance with the VALMIN and JORC Codes

The Report has been prepared in accordance with the VALMIN Code 2015¹, which is binding upon Members of the Australian Institute of Geoscientists (AIG) and the Australasian Institute of Mining and Metallurgy (AusIMM), the JORC Code² and the rules and guidelines issued by such bodies as the Australian Securities and Investments Commission (ASIC) and ASX that pertain to Independent Experts’ Reports (IERs).

The authors have taken due note of the rules and guidelines issued by such bodies as ASIC and ASX, including ASIC Regulatory Guide 111 – Content of Expert Reports, and ASIC Regulatory Guide 112 – Independence of Experts.

¹ *Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets. The VALMIN Code, 2015 Edition.* Prepared by the VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists.

² *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition.* Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

CSA Global notes that the current VALMIN Code no longer addresses petroleum specifically, but is suggested as a guide to good practice when undertaking technical assessments and valuations of petroleum assets. CSA Global has followed this approach.

1.3 Principal Sources of Information

The Report has been based upon information available up to and including 5 September 2019. The information was provided to CSA Global by SPB or has been sourced from the public domain and includes both published and unpublished technical reports prepared by consultants, and other data relevant to the Company's projects.

The authors have endeavoured, by making all reasonable enquiries, to confirm the authenticity and completeness of the technical data upon which this Independent Technical Assessment and Valuation Report is based.

CSA Global Principal Geological Consultant Adrian Nucahyo visited the Mandiri tenement and heavy mineral processing plant on 22 and 23 September 2019.

With regards to the current status of the Mandiri tenement, CSA Global has relied on the opinion of Sholeh, Adnan & Associates, an independent law firm based in Jakarta, Indonesia, as stated in their report titled *Legal opinion for a report on Mineral Concession (IUP OP /DPE/IX/2010) and enforceability of related exclusive operation and management agreement for South Pacific Resources Limited*, dated 31 July 2019. CSA Global makes no other assessment or assertion as to the legal title of tenements and is not qualified to do so.

1.4 Authors of the Report – Qualifications, Experience and Competence

This Report has been prepared by CSA Global, a privately-owned consulting company, and member of the ERM Group of Companies, that has been operating for over 30 years; with its headquarters in Perth, Western Australia.

CSA Global provides multi-disciplinary services to a broad spectrum of clients across the global mining industry. Services are provided across all stages of the mining cycle from project generation, to exploration, resource estimation, project evaluation, development studies, operations assistance, and corporate advice, such as valuations and independent technical documentation.

The information in this Report that relates to Technical Assessment and Valuation of the heavy mineral sands Mineral Assets reflects information compiled and conclusions derived Neal Leggo (MAIG, MSEG). Mr Leggo is not related a party or employee of SPB. He has sufficient experience relevant to the Technical Assessment and Valuation of the Mineral Assets under consideration and to the activity which he is undertaking to qualify as a Practitioner as defined in the 2015 edition of the "Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets". Mr Leggo consent to the inclusion in the Report of the matters based on his information in the form and context in which it appears.

Mr Neal Leggo (B.Sc. (Hons) Geology, MAIG, MSEG) is a geologist with over 30 years' experience including five years in exploration management, ten years consulting, four years in resource geology, three years in underground operations, one year in open pit mining and ten years in mineral exploration. He has worked in a variety of Australian geological terrains and specialises in copper, gold, silver-lead-zinc and iron ore for which he has the experience required for code-compliant reporting. He also has experience with uranium, vanadium, manganese, tin, tungsten, nickel, lithium, niobium, gemstones, mineral sands and industrial minerals. Neal provides a range of consulting services including independent expert reporting, technical studies, reviews, audits and management of exploration projects. He offers extensive knowledge of available geological, geophysical, geochemical and exploration techniques and methodologies, combined with strong experience in resource estimation, feasibility study, development and mining of mineral deposits.

The information in this Report that relates to Technical Assessment and Valuation of oil and gas assets reflects information compiled and conclusions derived Robert Holm (MAIG, MAAPG). Dr Holm is not related a party

or employee of SPB. He has sufficient experience relevant to the Technical Assessment and Valuation of the Mineral Assets under consideration and to the activity which he is undertaking to qualify as a Practitioner as defined in the 2015 edition of the “Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets”. Dr Holm consent to the inclusion in the Report of the matters based on his information in the form and context in which it appears.

Dr Robert Holm (Ph.D Earth Science, P.G.Dip. Engineering Geology, B.Sc. Hons. Geology, MAIG, MAAPG) is an expert geologist with an extensive and diverse background encompassing both the minerals and oil and gas sectors. He specialises in structural geology, drawing on experience ranging from Proterozoic IOCG-orogenic systems to recent and actively forming analogues across the SW Pacific, to petroleum-bearing basins of South America, to investigate structurally controlled mineral and hydrocarbon systems across multiple spatial and temporal scales. Robert also has expertise in unravelling the metallogenesis and prospectivity of complex tectonic settings through multidisciplinary methods that include, but are not limited to, structural geology and geodynamics, geophysical interpretation, petrology, geochemistry and isotope systematics, and geochronology.

The site visit to the Mandiri tenement and heavy mineral processing plant was carried out by CSA Global Principal Geological Consultant, Mr Adrian Nurcahyo, BEng (Geology), MAIG. Mr Nurcahyo is a geologist with over sixteen (16) years’ experience in project generation, project management, business development, exploration (field mapping and drilling supervision), resource development and mining, geophysics, hydrogeology, geotechnical studies and industrial minerals in Indonesia and abroad.

The valuation was completed by CSA Global Principal Geologist – Valuation, Mr Trivindren Naidoo, MSc (Exploration Geology), Grad.Cert (Mineral Economics), FGSSA, MAusIMM. Mr Naidoo is a consulting geologist with over 20 years’ experience in the minerals industry, including 15 years as a consultant. He has an extensive background in mineral exploration, and specialises in due diligence reviews, project evaluations and valuations, as well as code-compliant reporting. Mr Naidoo’s knowledge is broad-based, and he has wide-ranging experience in the field of mineral exploration and resource development, having managed or consulted on various projects ranging from first-pass grassroots exploration to brownfields exploration and evaluation. Mr Naidoo has the relevant qualifications, experience, competence, and independence to be considered a “Specialist” under the definitions provided in the VALMIN Code and a “Competent Person” as defined in the JORC Code.

The reviewer of the report is CSA Global Principal Consultant, Mr Sam Ulrich (BSc (Hons), GDipAppFin, MAusIMM, MAIG, and FFin). Mr Ulrich has over 20 years’ experience in mineral exploration and corporate services. His exploration experience ranges from grassroots to near mine resource development in Australia and Asia. Mr Ulrich is part of CSA Global’s corporate team primarily working on transactions. He provides geological due diligence, independent technical reporting for mergers and acquisitions, and company listings, as well as acting as Competent Person under the JORC Code for a range of Exploration Results in gold, base metals, and uranium. Mr Ulrich is a valuation expert and VALMIN specialist, delivering technical appraisals and valuations for independent expert reports, target statements, schemes of arrangement, stamp duty assessments, asset impairments, and due diligence exercises on projects worldwide. He has extensive experience in the exploration and development of Archaean orogenic gold deposits, which combined with his mineral economics research into Australian gold mines, provides him with specialist skills in applying economic/valuation criteria to exploration targeting and ranking, and the valuation of mineral assets. Mr Ulrich has the relevant qualifications, experience, competence, and independence to be considered a “Specialist” under the definitions provided in the VALMIN Code and a “Competent Person” as defined in the JORC Code.

This Report was authorised by CSA Global Manager Corporate and Principal Consultant, Graham Jeffress, BSc (Hons) (Applied Geology), RPGeo (Mineral Exploration), FAIG, FAusIMM, FSEG, MGSA. Mr Jeffress is a geologist with over 30 years’ experience in exploration geology and management in Australia, PNG and Indonesia. He has worked in exploration (ranging from grassroots reconnaissance through to brownfields,

near-mine, and resource definition), project evaluation and mining in a variety of geological terrains, commodities, and mineralisation styles within Australia and internationally. He is competent in multidisciplinary exploration, and proficient at undertaking prospect evaluation and all phases of exploration. Graham has completed numerous independent technical reports (IGR, CPR, QPR) and valuations of mineral assets. He now coordinates and participates in CSA Global's activities providing expert technical reviews, valuations, and independent reporting services to groups desiring improved understanding of the value, risks, and opportunities associated with mineral investment opportunities.

1.5 Prior Association and Independence

The authors of this Report have no prior association with SPB in regard to the Mineral Assets. Neither CSA Global, nor the authors of this Report, have or have had previously, any material interest in SPB or the mineral properties in which SPB have an interest. CSA Global's relationship with SPB is solely one of professional association between client and independent consultant.

CSA Global is an independent geological consultancy. This Report is prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this ITAVR. The fee for the preparation of this Report (including reimbursement for costs including a site visit) is approximately A\$48,600.

No member or employee of CSA Global is, or is intended to be, a director, officer or other direct employee of SPB. No member or employee of CSA Global has, or has had, any shareholding in SPB. There is no formal agreement between CSA Global and SPB to CSA Global conducting further work for SPB.

1.6 Declarations

The statements and opinions contained in this Report are given in good faith and in the belief that they are not false or misleading. This Report has been compiled based on information available up to and including the date of this Report. The statements and opinions are based on the reference date of 25 September 2019 and could alter over time depending on exploration results, mineral prices and other relevant market factors.

The opinions expressed in this Report have been based on the information supplied to CSA Global by SPB. The opinions in this Report are provided in response to a specific request from Stantons to do so. CSA Global has exercised all due care in reviewing the supplied information. Whilst CSA Global has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. CSA Global does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this Report apply to the site conditions and features, as they existed at the time of CSA Global's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which CSA Global had no prior knowledge nor had the opportunity to evaluate.

CSA Global's valuations are based on information provided by SPB and public domain information. This information has been supplemented by making all reasonable enquiries to confirm the authenticity and completeness of the technical data.

No audit of any financial data has been conducted. The valuations discussed in this Report have been prepared at a valuation date of 25 September 2019. It is stressed that the values are opinions as to likely values, not absolute values, which can only be tested by going to the market.

2 Mandiri Heavy Mineral Sands Project

The primary source of information for this section is a Technical Assessment Report describing the Mandiri Project prepared by Continental Resource Management (CRM, Chisholm and Christiawan, 2019) in July 2019. CSA Global supplemented the work of Chisholm and Christiawan (2019) by completing review of their report and other source data, as well as by completing a site visit.

2.1 Background

2.1.1 Location and Access

The Mandiri deposit is located in the Kuala Kurun administration area, within the Gunung Mas Regency in Central Kalimantan and is approximately 170 km north of the provincial capital city Palangkaraya (Figure 1).

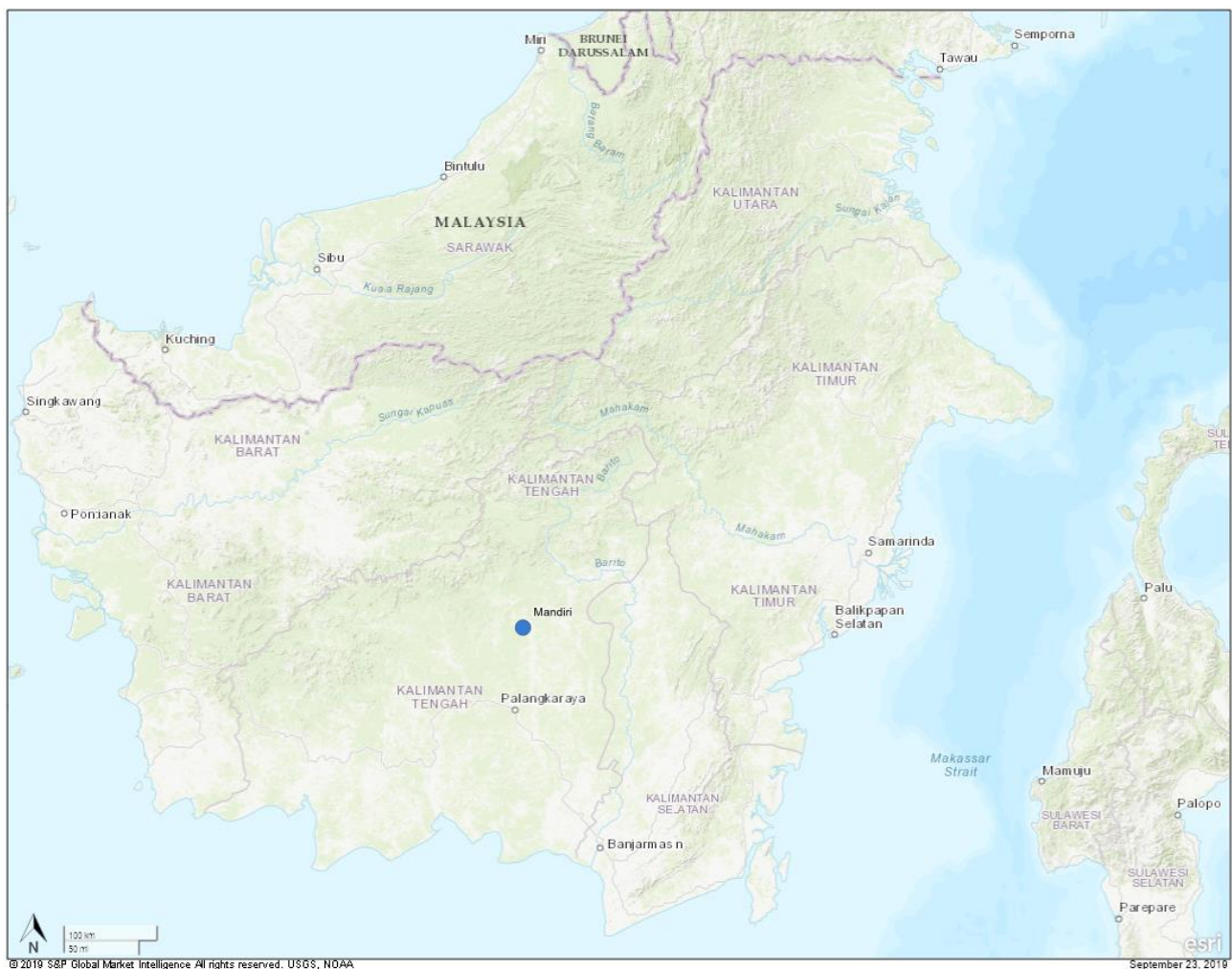


Figure 1: Location of Mandiri Project in Kalimantan, Indonesia
Source: S&P Global Mining Intelligence Platform

The tenement can be accessed by commercial flights from Jakarta to Palangkaraya in 1 hours and 20 minutes. From the airport, the drive to the tenement area takes about 4½ hours (Figure 2). The heavy mineral processing plant is located 23 km south of the Mandiri tenement.



Figure 2: Access road and tracks to Mandiri project
Source: CSA Global site visit

2.1.2 Ownership and Tenure

Takmur Pte. Ltd. (Takmur) is a Singapore-based company that has exclusive rights to the operation and management of a mineral sands tenement and production facility, which includes a premium quality mineral sands deposit in Indonesia.

In January 2019, PT Andary Usaha Makmur (PTAUM), a 99% owned subsidiary of Takmur, entered into an Exclusive Operation and Management Agreement with PT Investasi Mandiri (PTIM), the holder of the Mandiri Tenement and owner of a processing plant located 23 km to the south of the Mandiri Tenement. Under the agreement PT AUM has committed to provide mining equipment, technical and management knowhow to develop the PTIM business. Under the terms of the agreement, PTIM and its shareholders have delegated to PTAUM:

- the power to determine the financial and operational policy of PTIM;
- the right to appoint the majority of PTIM directors; and
- the right to receive 95% of PTIM's net profit on an annual basis as a compensation for the services provided to PTIM.

The above agreement results in control of PTIM by PTAUM.

PTIM is the holder of a 2,032 ha Heavy Mineral Sand (HMS) mining tenement, located close to Kuala Kurun city in the Gunung Mas Regency. The tenement is currently held under mining permit Izin Usaha Pertambangan – Operasi Produksi (IUP-OP) No. 16/DPE/IX/2010 issued by Bupati Gunung Mas on 2nd September 2010. PTIM has exclusive rights to perform exploration and mining works in the tenement area.

In accordance with Indonesian minerals legislation it is a requirement to construct a processing plant in order to obtain an export permit for minerals. Consequently, PTIM have a HMS processing plant located 23 km south of the Mandiri tenement that forms part of the Mineral Asset. The plant is currently in operation producing 500 t per month of high-grade zircon and rutile/ilmenite product from HM concentrate purchased from artisanal miners including those operating within the Mandiri tenement. In 2018 the plant produced 7,269 t of product derived from the Mandiri tenement.

CSA Global has relied on the opinion of Sholeh, Adnan & Associates, an independent law firm based in Jakarta, Indonesia, as stated in their report titled *Legal opinion for a report on Mineral Concession (IUP OP /DPE/IX/2010) and enforceability of related exclusive operation and management agreement for South Pacific Resources Limited*, dated 31 July 2019. CSA Global makes no other assessment or assertion as to the legal title

of tenements and is not qualified to do so. A summary of the license terms is provided in Table 2, and the extent of the tenement is indicated in Figure 3.

Table 2: Mandiri license terms

License ID	Granted by	Mineral	Permit Holder	Area (ha)	Grant Date	Renewal Date	Annual Rents, Rates and/or Taxes (IDR MM)
IUP-OP No 16/DPE/IX/2010	Regency Government - Gunung Mas	Zircon	PT Investasi Mandiri	2,035	3-Sep-2010	31-Dec-2020	162.2

Source: Sholeh, Adnan & Associates (2019).

Sholeh, Adnan & Associates (2019) state that "Mining Business License IUP-OP 16/DPE/IX/2010 has been duly and validly granted to PT Investasi Mandiri by the Regent of Gunung Mas" and "PT Investasi Mandiri has the right to explore for, extract, produce and remove zircon from the area covered by the IUP-OP".

The Mineral Asset that is included in this report is the Mandiri Project that comprises one tenement and associated mineral processing plant, situated in the Gunung Mas Regency of the Central Kalimantan, Indonesia. Under Indonesian Mineral Legislation it is a requirement that a production facility be established as part of the licence approval procedure for the export on minerals from the tenement. A mineral processing facility that forms part of the Mandiri tenement is located 23.3 km to the south of the tenement.

The tenement is defined by the geographic coordinates shown in Table 3.

Table 3: Mandiri tenement coordinates

Point Number	Longitude	Latitude
1	113° 48' 59"	01° 10' 5"
2	113° 51' 49"	01° 10' 5"
3	113° 51' 49"	01° 11' 24"
4	113° 51' 6"	01° 11' 24"
5	113° 51' 6"	01° 12' 26.90"
6	113° 48' 59"	01° 12' 26.90"
7	113° 48' 59"	01° 10' 5"

The conditions of grant including Indonesian taxes and other financial obligation of PTIM are set out in the IUP. A summary of some of the key provisions comprise (Chisholm and Christiawan 2019):

- Dead rent is payable to Government of Indonesia at rate of US\$4 per hectare per annum,
- Royalty on thermal Heavy Mineral Sand produced is 3% by April 2015,
- Corporate tax of 25 % is set by Government of Indonesia,
- A withholding tax is payable on interest and dividends. This is set at 5% to 30% for non-resident foundation shareholder, but will increase to 20% for non-resident shareholders who are not foundation shareholders,
- PTIM shall collect, remit and report VAT on the delivery of taxable goods and or service at a rate of 10%,
- Land and building taxes payable to the local government are applicable, at rate of US\$0.53 per hectare,
- Environmental obligations including reclamation bonding and plans have been approved by local government as part of the mine approval process in the term of reclamation bank guarantee,

The development of HMS occurrences in Indonesia consists of obtaining approval from the central government for three progressive stages of status:

- Exploration stage - to obtain approval for detail exploration work comprising drilling, sampling, Heavy Mineral Sand grade analysis, geophysical logging, topography survey and bulk sampling.
- Feasibility study stage - to obtain approval for advance exploration and technical constraint work comprising mine method and design, geotechnical constraint, capex – opex study, financial model, HMS

beneficiation study, market analysis, social – culture – environment study. This stage is based on findings from the exploration stage. An environment impact analysis document is also required in the stage as a step towards the production stage.

- Production stage - to obtain approval in principal for executing HMS mining operation based on feasibility report and impact analysis document. The IUP-OP was granted to PTIM in March 2010.

2.1.3 *Environment, social and culture factors*

PTIM has advised that it is currently not facing any environmental or social litigation and has commenced exploration activities and feasibility studies in accordance with applicable regulations.

The tenement is situated in a production forest area. Some areas are overlapping with community rice farming and traditional hunting grounds. The community which is of multi-ethnic backgrounds appears to be supportive of PT Investasi Mandiri (PTIM)'s plans to develop the project (Chisholm and Christiawan, 2019). CSA Global did not observe anything during in our site visit that contradicts these points.

The Mandiri deposit is situated on the flood plain of the Kahayan river, legally classified into production forest area and conversion production forest area, but with tribal land ownership also established on it. The land has recently been used for traditional plantations, rice farming and gold mining, which covers most of the concession area. CSA Global's understanding is that following a relatively straightforward approval process mining can commence in the production forest areas.

No protected forest areas were flagged during the site visit.

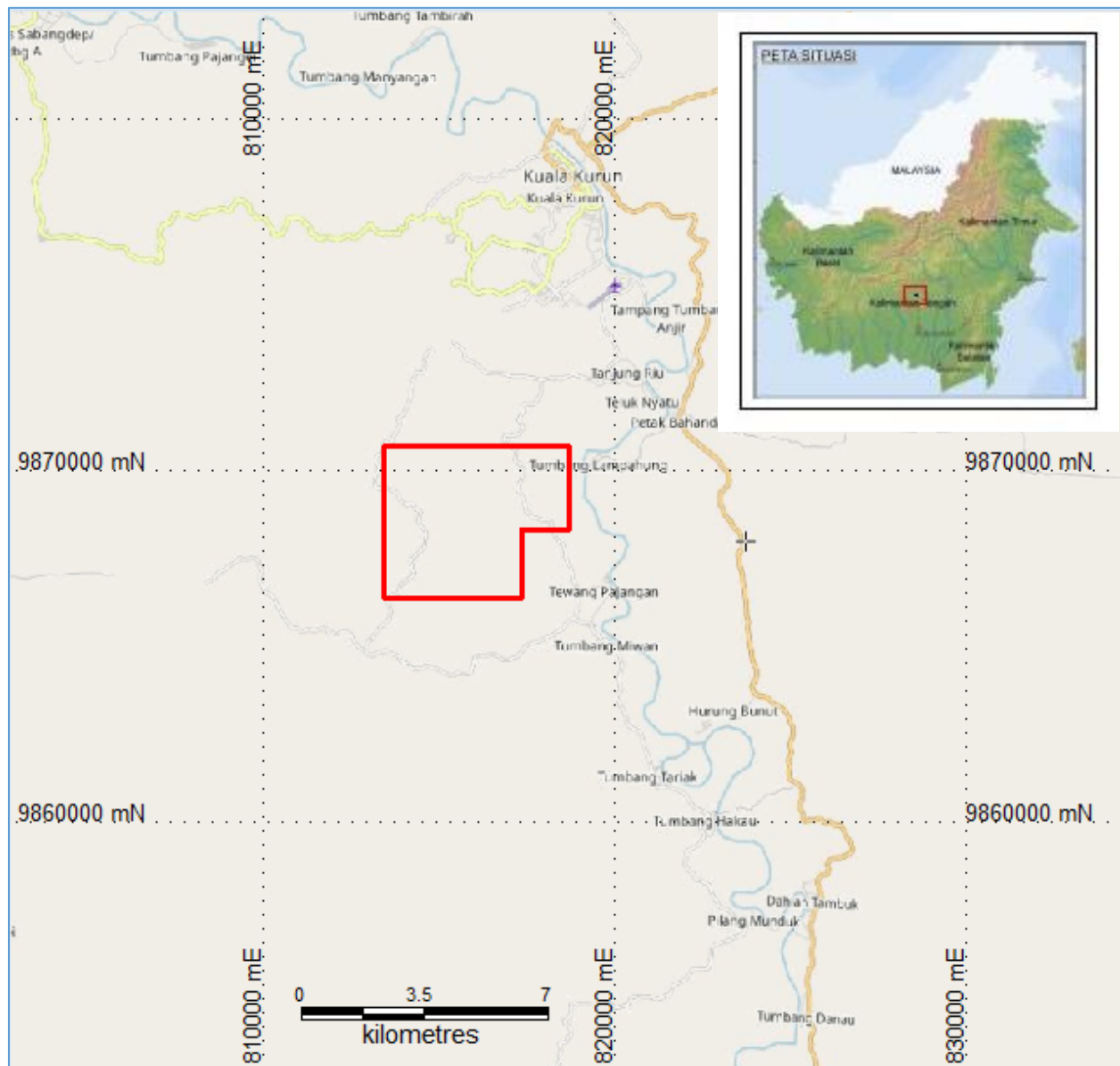


Figure 3: Mandiri tenement location map
Source: Chisholm and Christiawan (2019)

CSA Global understands that in accordance with Indonesian minerals legislation it is a requirement to construct a processing plant in order to obtain an export permit for minerals. Consequently, Mandiri have a heavy mineral sands (HMS) processing plant that forms part of the Mandiri Project. The plant is currently in operation and produced in excess of 3,000 t of zircon in 2018, processing 7,269 t of Heavy Mineral Concentrate derived from the Mandiri Project (CRM, 2019).

2.1.4 Topography and land use

The Mandiri deposit is situated on the flood plain of the Kahayan river, legally classified into production forest area and conversion production forest area, but with tribal land ownership also established on it. The land has recently been used for traditional plantations, rice farming and gold mining, which covers most of the concession area.

The condition of land cover consists of 40% of secondary forest, 30% bush, 15% of community garden, and the remaining 15% is open area which is the location of former mining (gold and zircon) as shown in Figure 4.



Figure 4: Local area (LHS) area disturbed by mining; (RHS) undisturbed area in the Mandiri Project
Source: CSA Global site visit

2.2 Exploration History

Historically, the sedimentary basins of Central and Western Kalimantan have been mined for alluvial gold and in some areas also for diamonds. More recently, it has been recognised that the alluvium hosting the gold is also prospective for HMS.

There is no record of any systematic exploration having been conducted over the Mandiri tenement area.

Chisholm and Christiawan (2019) report that artisanal miners have been active within the concession area for many years extracting gold and zircon using sluice boxes. The miners usually use a diesel pump to suck sand from shallow ponds to riffle boxes where the valuable components are recovered. Recovery is generally low and the depth of workings rarely exceeds 4 m.

2.3 Geology

2.3.1 Regional Geology

The Mandiri tenement is situated on a large anticline within the Barito Basin, which is a pull-apart sedimentary basin, of Paleogene age. The rocks underlying the Mandiri project comprise sedimentary rocks of Middle Miocene to Holocene age.

Historically, the sedimentary basins of Central and Western Kalimantan have been mined for alluvial gold and in some areas also for diamonds. More recently, it has been recognised that the alluvium hosting the gold is also prospective for HMS.

In 2018 Indonesia was ranked fourth in world zircon production with production of 100,000 metric tonnes (USGS Mineral Commodity Summaries).

2.3.2 Local Geology

The HMS bearing strata of the Mandiri deposit is ancient Kahayan alluvium, which was deposited during the Holocene age. In general, the alluvium has varying thickness of between 2 m and 10 m. The lithology consists of loose quartz, medium grained intercalated grey mudstone containing carbonaceous, shale and bed load stream product; coarse grain sand layer.

Chisholm and Christiawan (2019) quotes the following description of the alluvium and Werukin Formation from Nila, Rustandi and Heryanto (1995).

Alluvium, Holocene age, pale black to dark brown peat (paludal deposit); loose sands, yellowish colour, fine to coarse grained, unbedded (ancient Kahayan alluvium deposit); clay grey to brownish colour, very soft, locally containing plant remains (tidal area); kaolinite clay. The thickness of this unit ranges from 50 to 100 m.

Werukin Formation (Tmw), middle Miocene to Pleistocene, this formation comprises brownish black conglomerate, compact, clast consists of quartzite and basalt fragments, diameter 1 – 3 cm, open fabric with matrix of sand. Alternating with yellowish sandstone, medium to coarse grained, locally exhibit crossbedding. intercalated grey mudstone, rather soft, carbonaceous, contain sub-bituminous coal seam partly, appear as interbedded within sandstone bed with the thickness of 20 – 60 cm. The Werukin Formation has 300 m in thickness. Werukin Formation is deposited in a paralic environment. Werukin Formation is the one of main coal bearing Formations in Barito Basin.

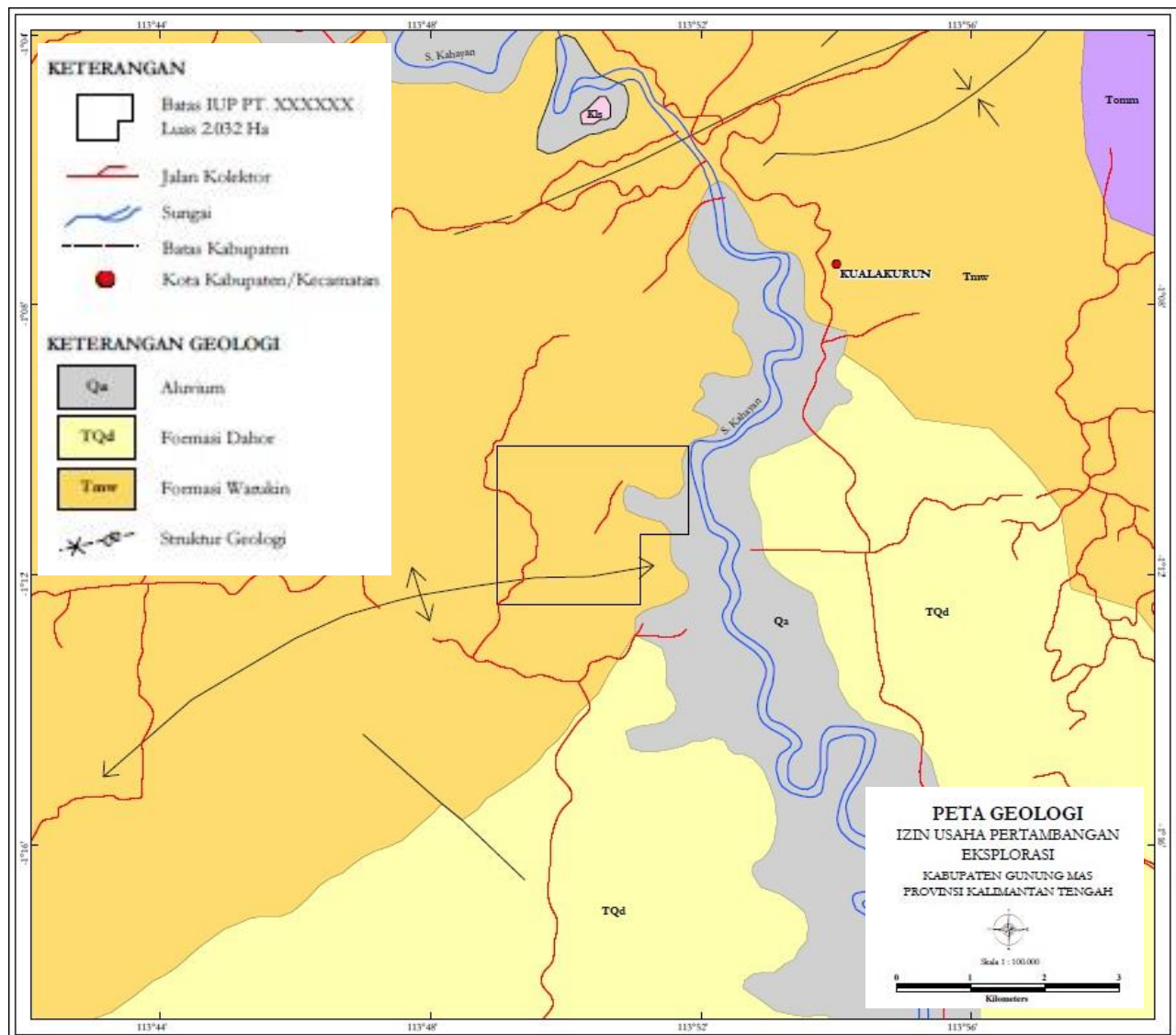


Figure 5: Geological map of the Mandiri tenement area
Source: Chisholm and Christiawan (2019)

2.3.3 Deposit Geology

Geologically the HMS deposit at Mandiri is a placer deposit formed in a flood plain environment by concentration of heavy minerals, mostly zircon ($ZrSiO_4$), rutile (TiO_2), leucoxene ($FeTiO_3, TiO_2$) and ilmenite

(FeTiO₃). Zircon is the most valuable component followed by rutile, leucoxene and ilmenite in terms of value given to the concentrate.

Gold, platinum and cassiterite have also been identified in the concentrate with gold recovered from the processing plant.

The deposit is overlain by the Werukin Formation. The heavy minerals within the source sediments attain an economic concentration by accumulation within low-energy environments within streams and most usually on beaches.

In alluvial placer deposits the medium to high energy zones on the stream are the meandering, bars and channel zone. In these zones, the HM grains accumulate because they are denser than the quartz grains they occur with and become stranded. It is for this reason that alluvial placer deposits are often referred to as "strand-line deposits".

The deposits are found in unconsolidated sand strata.

The mineralisation occurs as a tabular body within alluvium as a layer of between 2 m to around a maximum of 11.5 m (see Figure 6).



Figure 6: Heavy Mineral accumulations exposed in base of mining pit
Source: CSA Global

2.4 Mineral Resources

Chisholm and Christiawan (2019) provides documentation of the maiden Mineral Resource estimate for the Mandiri HMS deposit and provides the source for the following description, tables and figures. The full report by Chisholm and Christiawan (2019) is available elsewhere in the notice of meeting documentation.

2.4.1 Data

All exploration data has been acquired by the Company; there is no known previous exploration data available. The project database was compiled and validated in Micromine by SPB.

A program of auger drilling and surface geological mapping was conducted in November to December 2018 with a second and third phase of auger drilling completed during January and February 2019. The drilling data includes 52 auger holes from the locations shown in Figure 7. Collar coordinates, total depths and sample depths are provided for each hole in Table 4. Two auger holes were twinned. All holes were drilled vertically to a maximum of 11.5 m. The average hole depth was approximately 5.5 m.

The phase 1 was undertaken using hand auger methods using a 55 mm blade barrel auger, with 18 holes augured along traverses at 200 m spacing covering about 12% of the concession area. The phase 2 and 3 auger drilling used a motorised auger in an attempt to get samples at greater depth, but most of the 34 holes



The drilling, logging and sampling methodology was described in Chisholm and Christiawan (2019), by the Competent Person for the Mineral Resource. The auger core samples were carefully recovered from the auger barrel and placed in open PVC trays and sampled by 1 m sample spacing. All auger samples were geologically logged in sufficient detail, recording all significant properties including lithology, colour, grain size, boundary contact with adjacent lithologies and a general description of the material. The details of the core recovery were recorded for each run. Core recovery was generally high for samples above the water table. No useful data was collected from below the water table. All auger core was photographed. Auger core samples were placed in sample bags in 1 m intervals.

The samples were delivered to PTIM's office in Palangkaraya where the samples were analysed for Zr, Ti, Th & Fe using an Olympus portable XRF unit. Sub-samples were prepared using the 'cone and quarter' method. Samples were then composited into a single alluvial sand interval for each hole. Composite samples were dispatched for laboratory analysis. submitted to the UPTD Laboratorium Energi Dan Sumber Daya Mineral in Banjarbaru for analysis by XRF and laboratory determination of HM%, slimes% and oversize%.

Laboratory results for heavy mineral determination are provided in Table 4.

Table 4: Drill hole and heavy mineral determination data used in the Mineral Resource estimation

Hole-ID	East-UTM49M	North-UTM49M	From (m)	Interval (m)	Lab-HM%	Slimes%	Oversize%
DA-201	818600	9870600	0	5.00	7.45	9.74	15.58
DA-202	818597	9870398	0	6.00	8.32	8.94	14.99
DA-203	818599	9870200	0	3.00	5.72	9.36	16.23
DA-204	818573	9870005	1	2.00	5.94	9.21	15.65
DA-205	818600	9869782	2	3.00	6.54	9.45	14.73
DA-206	818591	9869569	1	3.00	8.45	9.45	14.76
DA-206R	818611	9869571	1	2.60	8.22	9.21	15.94
DA-207	818600	9869401	1	3.60	7.35	9.22	15.05
DA-215	818413	9869396	1	3.00	7.2	6.97	8.95
DA-223	818165	9869384	1	3.50	6.89	9.74	15.58
DA-229	817998	9869796	1	2.40	8.9	9.45	16.75
DA-230	817988	9869605	1	3.00	9.1	7.45	16.2
DA-231	818002	9869403	0	3.40	8.35	8.24	15.8
DA-232	817995	9869191	0	3.40	6.26	7.85	15.35
DA-239	817802	9869396	1	3.40	8.37	9.35	16.55
DA-240	817803	9869207	1	5.00	5.93	8.1	15.98
DA-247	817595	9869400	1	2.40	6.94	9.22	16.45
DA-254	816284	9869813	3	2.00	5.46	8.98	14.65
DA-261	817011	9869184	0	3.00	8.28	9.42	16.85
DA-262	816169	9868526	1	3.40	6.64	7.84	15.32
DA-265R	815751	9870226	1	1.40	5.52	8.73	15.92
DS-1-03	816403	9870398	3	2.00	5.62	9.47	15.83
DS-1-04	815597	9870009	2	2.00	5.94	8.64	15.32
DS-1-05	817208	9869995	1	3.35	7.59	9.22	15.96
DS-1-06	817198	9869595	4	3.00	5.86	8.74	15.26
DS-1-07	816399	9869603	1	3.80	7.42	9.13	15.74
DS-1-08	815605	9869590	0	3.25	7.54	8.94	16.43
DS-1-09	815610	9869207	2	2.00	7.38	9.04	15.34
DS-1-10	816408	9869210	1	3.50	7.64	9.63	16.34
DS-1-11	818007	9868793	4.5	2.50	6.84	8.64	15.28
DS-1-12	817198	9868810	4.45	0.30	2.94	7.52	6.42
DS-1-13	816405	9868795	1	3.60	7.42	9.31	15.42
DS-1-14	815605	9868810	1	2.20	7.52	8.93	16.42
DS-1-15	818406	9869981	0	4.65	8.42	9.53	16.65
DS-1-16	818001	9868403	0	3.00	5.98	8.98	15.84
DS-1-30	818393	9869595	1	3.70	8.73	8.43	16.2
DS-2-01	817995	9870409	0	2.60	5.75	6.24	21.23
DS-2-02	817212	9870393	0	4.00	6.84	8.85	16.57
DS-2-17	817234	9868017	0	1.80	4.82	9.5	15.8
DS-2-18	816379	9868007	0	8.60	7.89	8.45	15.21
DS-2-19	815656	9868011	0	1.20	3.72	9.85	14.36
DS-2-20	817207	9867200	0	2.20	6.42	9.23	16.54
DS-2-21	816393	9867216	0	7.35	8.94	9.24	16.89
DS-2-22	815594	9867188	0	6.00	8.62	9.22	16.85
DS-3-23	814810	9866776	0	11.50	7.42	9.35	16.04
DS-3-24	814809	9867620	0	6.70	6.85	9.42	15.88
DS-3-25	814804	9868403	0	5.00	7.96	9.45	16.75
DS-3-26	814798	9869211	0	0.00	0	0	0
DS-3-31	813999	9868803	0	9.60	8.24	8.95	15.94
DS-3-32	813998	9867985	0	8.50	8.52	9.82	16.52
DS-3-33	814004	9867194	0	2.15	5.84	6.24	21.23

Quality Control

A number of Quality Assurance/Quality Control (QA/QC) measures were implemented during exploration.

Two auger holes were twinned by a second hole drilled approximately 3 m apart. The holes are designated with a suffix "R". The second twinned hole was only 1.2 m in depth and no samples were collected. The results for auger holes DA-206 & DA-206R yielded quite comparable laboratory results.

A set of six standards were utilised to test the accuracy of the reported results of the Olympus portable XRF unit. Results were reported to be equivocal and it was concluded this was due to the different matrix of the samples relative to HMS material.

No duplicates were specifically collected as part of the QA/QC which is an item that will need to be changed for future drilling programmes.

One composite sample previously laboratory analysed was recovered from the laboratory and analysed by the Olympus XRF unit. Similarly, samples analysed in the field by the Olympus XRF unit were submitted for laboratory analysis at UPTD Laboratorium Energi Dan Sumber Daya Mineral.

Mineral Assemblage Data

No mineral assemblage analytical work was performed on the auger drill samples collected by SPB.

The mineralogical content of a 551 t batch of dry zircon concentrate provides an indication as to the mineral assemblage of the HMS (Table 5). This table does not provide the relative proportions of the minerals present in the Mandiri HMS as it is for the zircon concentrate after separation of the titanium minerals. The mineral assemblage of the product from the Mandiri project was established through the certified laboratory analyses required by legislation for export product.

Table 5: Mineralogical composition of a high grade zircon concentrate from the Mandiri Tenement

Mineral	Weight (t)	Relative%
Zircon	358	64.97
Ilmenite - mixed	104	18.87
Rutile	13	2.36
Monazite – mixed	4	0.73
Trash	72	13.07
Total MH	551	100.00
Gold	1,041 g	1.89 g/t

The artisanal miners were mining and processing the heavy mineral sand principally for gold and the 1.89 g/t Au represents the unrecovered portion.

2.4.2 Interpretation

The Mandiri HMS deposit occurs from surface and has been mapped over an area of 16 km². Average drill hole spacing is highly variable, ranging from 800 m x 400 m to 200 m x 50 m. Auger holes were vertical and the target HMS formation was horizontal. Interpretation of the lithological boundaries and the proposal of a conceptual model for the mineralisation are supported by 52 auger drill holes combined with surface mapping and evidence of VHM production from numerous shallow pits scattered across the project area.

Geological continuity is based upon a coherent and predictable model relevant to HMS deposits, but further drilling and mapping is required to refine the geological model. The width of mineralised zones varies from 0.35 m to 5 m with an average of 3.06 m.

The mineralised zone tested is restricted to above the water table due to constraints of the drilling method employed. The majority of holes were terminated in HMS mineralisation due to recovery problems below the water table. No mineralisation is interpreted below mineralised drill samples. An exploration target has been estimated below the Mineral Resource (Section 2.5.1).

The area within which the mineral resource was estimated represents most of the area of the tenement and was limited to the area of currently available drilling. It is likely that HMS is present outside of the current resource area, but it cannot be quantified.

2.4.3 Modelling

The resource estimations were undertaken by Chisholm and Christiawan (2019), using Micromine 2018.1 software. Drill hole data was imported into the software.

No upper cut was applied to the composite grades prior to grade estimation.

The resource estimate employed Inverse Distance modelling method to produce a block model of the mineralisation within the deposit. A single, simple block model was produced as a single layer of blocks. The use of the composited single interval for the mineralisation meant that a wireframe was unnecessary in order to constrain the volume and grade of the deposit and used to create a three-dimensional model of the geology. A parent cell block size of 100 m x 100 m (east x west) was selected, with the vertical dimension arbitrary (1 m). For resource reporting, the 1 m Z value of the parent block model was replaced with the interpolated interval thickness for each block.

A spherical search distance of 550 m was used with an inverse distance cubed interpolation for the grade, density and mineralised interval thickness.

Block model validation has been carried out by the Competent Person using input and output correlation. All validation methods have produced acceptable results.

A density factor was estimated for each mineralised intersection based on the SG calculated for each ore block on the basis of its interpolated HM content according to the standard formula $SG = 1.686 + (0.0108 \times HM\%)$. The average density for the deposit is 1.75 t/m³ which was used as a global density factor.

Due to the limited amount of drilling the resultant grade interpolation shows a pattern strongly related to the grade of each individual drill hole as can be seen in Figure 8 and Figure 9.

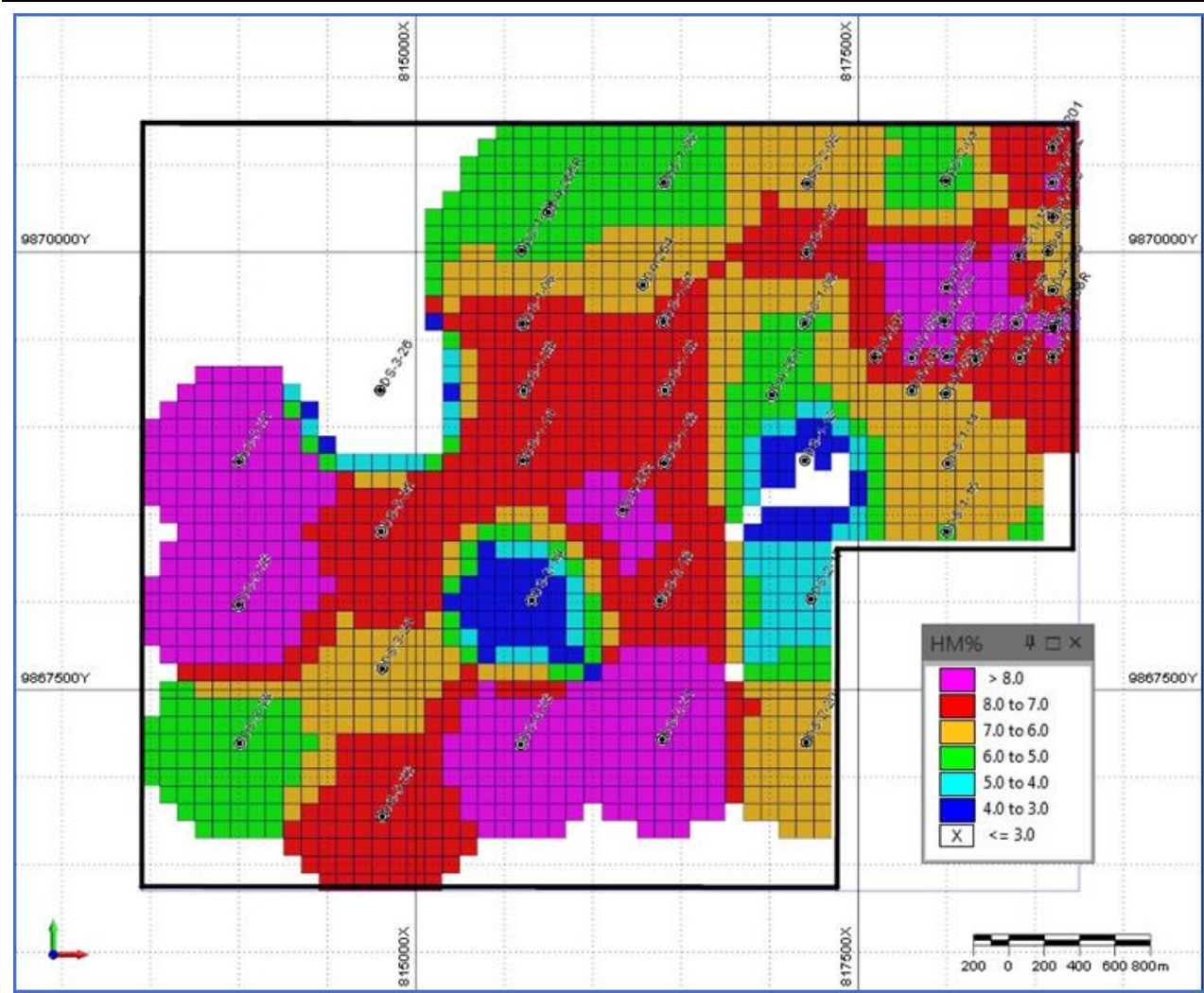


Figure 8: Plan view of the Mandiri deposit block model and auger holes – THM grade

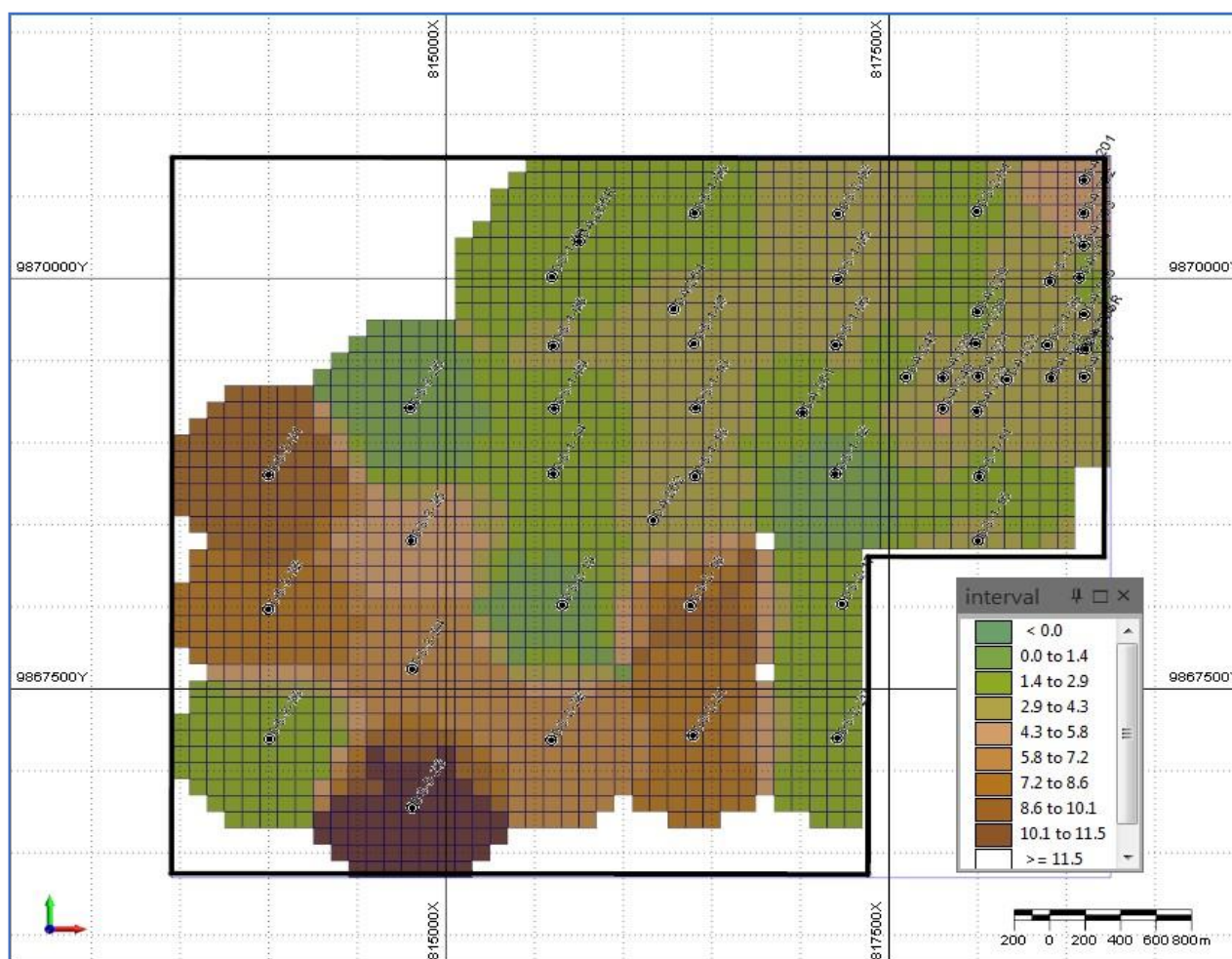


Figure 9: Plan view of the Mandiri deposit block model and auger holes – deposit thickness

2.4.4 Classification and Reporting

The Inferred Mineral Resources for the Mandiri HMS deposit on the Mandiri Tenement are defined as 126 Mt containing 7% THM, 9% slimes and 16% oversize at a lower cut-off grade of 2% as detailed in Table 6 and Table 7.

Table 6: Mineral Resource estimate for the Mandiri Project - THM

Area	Category	Tonnage (Mt)	Total Heavy Minerals (%)	Slimes (%)	Oversize (%)
Mandiri	Inferred	126	7	9	16

At lower cut-off grade of 2%; figures are rounded to reflect the precision of the estimate

Table 7: Mineral Resource estimate for the Mandiri Project - Mineral assemblage

Component	Tonnage (Mt)	Heavy Minerals (%)	Zircon (%)	Ilmenite (%)	Rutile (%)	Other (%)
Relative %	126	7	68	9.5	8.5	1

Note: Mineral percentage estimates are based on production data from the PTIM processing plant; figures are rounded to reflect the precision of the estimate.

As no mineral assemblage analytical work was performed on the auger drill samples collected by SPB, the mineral assemblage proportions were estimated based on the mineralogical content of a 551 t batch of dry

zircon concentrate from the PTMI heavy mineral processing plant. The source of the plant input material was from the deposit area, but the source cannot be quantified; this is discussed further in Section 2.4.5.

Using the mineral assemblage estimated for the Mandiri deposit, outlined in Table 7, the tonnage of contained *in situ* zircon, ilmenite and rutile within this Mineral Resource can be estimated as detailed in Table 8. Together the *in situ* valuable heavy minerals total is estimated to be approximately 7.6 Mt. CSA Global note that the quantity of recoverable valuable heavy minerals is significantly less than this figure and that recovery factors cannot be estimated until significantly more exploration and test work is conducted.

Table 8: Mineral assemblage and contained t of the components (unrounded)

Component	Zircon	Ilmenite	Rutile	Other	Waste + H ₂ O	Total Material
Contained Mineral	6.0 Mt	0.8 Mt	0.7 Mt	0.1 Mt	1.1 Mt	8.8 Mt

Note: Mineral percentage estimates are based on production data from the PTIM processing plant; figures are rounded to reflect the precision of the estimate and totals may not agree due to rounding.

NB PTIM only currently has rights to sell zircon.

The Mineral Resource has been classified by Dr John Chisholm, the Competent Person, at the Inferred category, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). He states that the criteria considered in determining this classification were geological continuity, grade continuity, data quality, drill hole spacing.

It has been assumed that the VHM content of the deposit can be effectively recovered using conventional mineral sands treatment processes, based on the recoveries obtained by the currently operating processing plant (refer Section 2.4.5). It has been assumed that the Mandiri deposit will be mined by dredging. No dilution has been built into the resource model.

About 60% of the mineralised area has been disturbed by artisanal mining activity but it is noted that this activity was only over shallow depths and the recovery was very poor. CSA Global note that no allowance for artisanal mining activity was made to the volume/tonnage of the mineral resource.

Based on production records for material produced from the Mandiri project area it is assumed that all zirconium is in the form of zircon, and all titanium is in the form of rutile and ilmenite in the proportion of 48% and 52%.

2.4.5 Current Mining and Mineral Processing Activities

PTIM has constructed a processing plant located 23 km to the south of the current Mandiri deposit area.

CSA Global visited the plant as well as the mining areas. CSA Global confirmed that no chemical concentration process was used in the plant process, and the water source is an artesian well in the plant area, with the water being re-used and re-cycled through the plant. Zircon concentrate is transported to the port for export, with ilmenite/rutile concentrate stored in a stockyard at the plant site.

The plant incorporates the standard HM processing equipment in the form of dryers, gravity shaking tables, electro-static separators and electro-magnetic separators. The current production capacity is in the order of 500 tpm.

There is current production from the tenement by contracted artisanal miners, which is transported to the processing plant for recovery of VHM under contract arrangements. Production of HM concentrate from the tenement is available for the past year. A total of 7,269 t of HM concentrate was purchased from the artisanal miners. It is not possible to determine the grade of the Mandiri HMS on the basis of the mined material, as the artisanal miners do not record the volume of sand processed to obtain the concentrates, and their recovery process maximises recovery of gold and zircon at the expense of reduced ilmenite and rutile recovery. The artisanal miners are paid for concentrate produced based on the zircon content (Chisholm and Christiawan, 2019).

2.5 Exploration Potential

The main area for potential mineralisation is below the water table as the auger drilling only tested the alluvial zone above the water table. The deepest auger hole that intersected bedrock was 10 m in depth. It is most likely that additional HMS accumulations will be located below the currently defined resource. Testing this zone will require drilling using an aircore mechanised drilling rig.

2.5.1 Exploration Target

Potential resources can be termed as an exploration target under clause 17 of the JORC Code which specifies that an exploration target is an estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade, relates to mineralisation for which there has been insufficient exploration to estimate a mineral resource.

In the case of the Mandiri Tenement, the Exploration Target for HMS within the Mandiri Tenement has been estimated by SPB in the order of 25–30 Mt of sand containing 4–7% heavy minerals (Chisholm and Christiawan, 2019). The Competent Person for this exploration target is Dr John Chisholm. The basis of the exploration target below the water table is the areal extent of HM mineralisation established through auger drilling to the depth of the water table, and an assumed range of thicknesses of mineralisation below the water table. The grade is assumed to be similar to the grade of the mineralisation above the water table. These assumptions will need to be checked by drilling below the water table. The potential quantity and grade is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource. CSA Global understands that over the next 12–18 months the company will test the validity of the Exploration target as part of proposed drilling activities infilling the current Inferred Mineral Resources.

CSA Global consider that there are reasonable prospects to advance this exploration target to mineral resource classification through exploration drilling using mechanised aircore drilling rigs.

2.5.2 Alluvial Gold Mineralisation

The Mandiri Tenement is known to contain alluvial gold which has been exploited by artisanal miners.

PTIM was not able to provide data on how much gold the artisanal miners are producing but Chisholm and Christiawan (2019) and CSA Global on their site visits to the project noted that quantities of gold are being recovered by the Mandiri Project processing facility which purchases heavy mineral concentrate from the artisanal miners.

CSA Global notes that the current licence held by PTIM only provides for the exploitation of zircon, and other minerals such as rutile must be stockpiled on site until export permission is granted.

Alluvial gold mineralisation is very difficult to estimate without extensive specially designed sampling programmes. While noting its presence, CSA have concluded that the alluvial gold at Mandiri is not material to a valuation of the project due to the apparent small quantities present and the uncertainty over the extent of the alluvial gold and the lack of a licence to currently exploit gold.

2.6 Summary and Discussion

CSA Global consider that the Mandiri heavy mineral sands (HMS) Project is an Advanced Exploration Project, as defined in the VALMIN Code, with a maiden Inferred Mineral Resource recently prepared.

CSA Global consider that the Mandiri resource is a low confidence Inferred Mineral Resource, primarily because of the small number of drill holes which have defined the mineralisation, but also due to the quality of the sampling, the compositing of samples, the limited number of composites submitted for analysis, the analysis methods, and the grade modelling methods. The lack of any mineral assemblage analytical work on the drill samples used for the resource estimate is a further area of uncertainty. The mineral assemblage

proportions were assumed based on the mineralogical content of concentrate from the PTMI processing plant where the source of the plant input material could not be quantified.

In combination these factors are all considered to reduce the confidence in Mineral Resource reporting. Significant improvements in each of these areas would be required to report to the level of Indicated Mineral Resources, along with significantly increased drill density.

SPB have defined an exploration target below the Mineral Resource. CSA Global concur that there is significant opportunity to increase the size of the resource by deeper drilling. This will require mechanised aircore drilling techniques to penetrate the water table and obtain sample from the water saturated alluvial deposits is at depth.

SPB have identified exploration potential between the margins of the current mineral resource and the tenement boundary, and CSA Global concur that this area has potential to increase the size of the resource.

The deposit is currently being exploited through small-scale mining activity, with effective mineral processing occurring at SPB's mineral processing facility located nearby. This provides strong support for the potential of the deposit for eventual economic development.

CSA Global consider that further exploration and development studies of the Mandiri heavy mineral sands project is warranted.

3 Papua New Guinea Oil and Gas Projects

3.1 Background

The primary source of data and information used in the preparation of this section were ASX releases (Orchid Capital Ltd Prospectus, 29 May 2012; Coral Sea Petroleum Annual Report 30 June 2013), supplementary information was derived from public domain information. Unless otherwise referenced, information and figures are derived from the above sources. No additional data or information was supplied by SPB.

SPB is the 100% holder of five conventional petroleum prospecting licences in Papua New Guinea (Table 9; Figure 10). PPL 366 and 367 are located onshore and PPL 356 and 357 offshore in the Gulf of Papua. PPL 358 is in the frontier Cape Vogel Basin. The five petroleum prospecting licences were obtained by SPB, trading as Coral Sea Petroleum Ltd (CSP), following the acquisition of Indo Pacific Energy Pty Ltd ("IPE") and its subsidiary Coral Sea Petroleum (PNG) Limited ("CSP (PNG)"), which was completed on 3 August 2012. It is CSA Global's understanding that the current status of tenure for all PPLs is currently unclear and cannot be confirmed by SPB.

Table 9: Conventional petroleum prospecting licences held by SPB.

Petroleum Prospecting License	Location	SPB equity
PPL 356 – Dibiri Licence	Offshore Papuan Basin, PNG	100%
PPL 357 – Hiri Licence	Offshore Papuan Basin, PNG	100%
PPL 358 – Cape Vogel Licence	Offshore Cape Vogel Basin, PNG	100%
PPL 366 – Biwai Licence	Onshore Papuan Basin, PNG	100%
PPL 367 – Turama Licence	Onshore Papuan Basin, PNG	100%

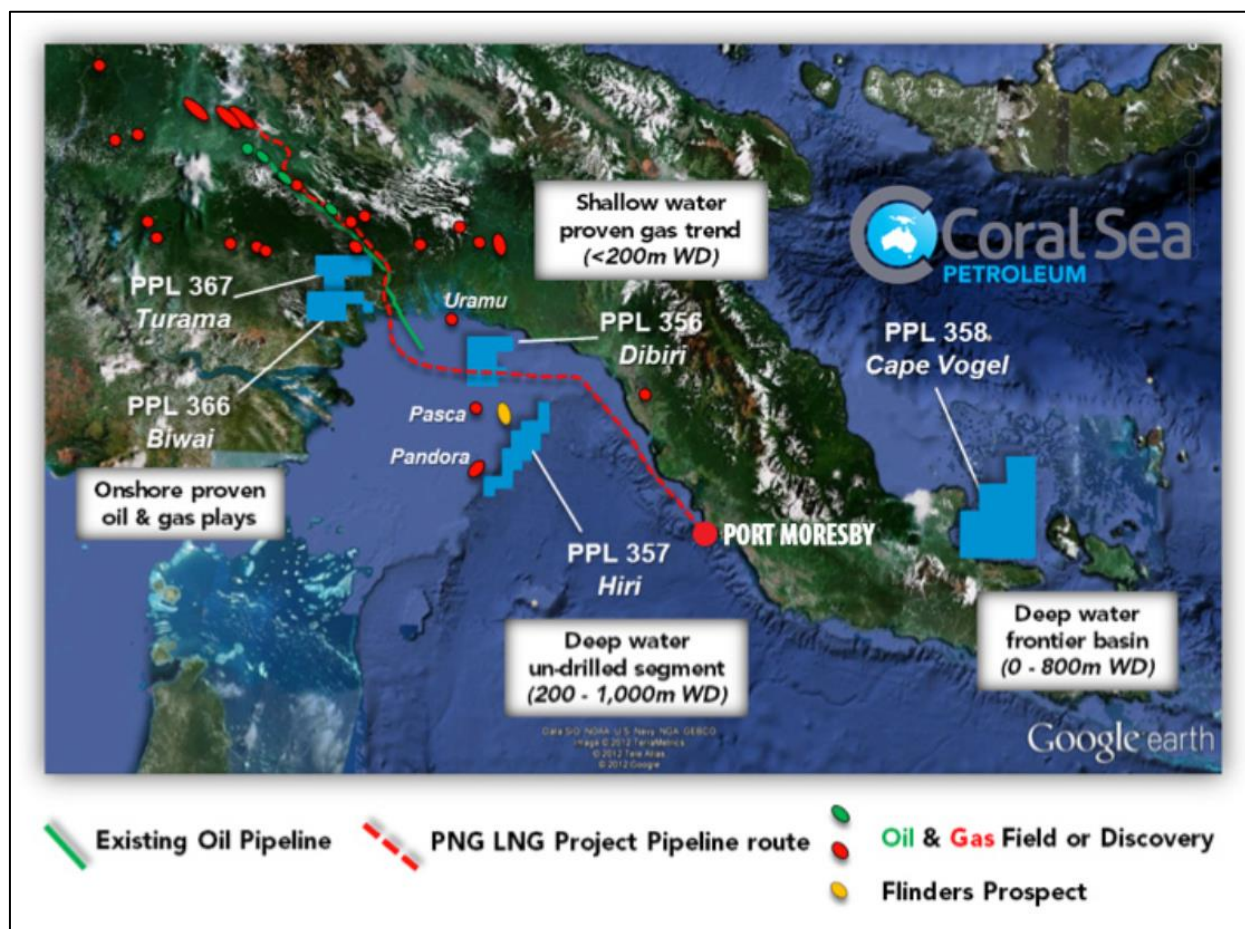


Figure 10: Location of South Pacific Resources petroleum prospecting licences in PNG

3.2 Exploration History

3.2.1 SPB Exploration Activities

Up to the year ending 30 June 2013 SPB reported it had completed gathering all available open-file well, seismic and other data in all five of its PPLs. SPB also reported at this time that it had conducted a regional interpretation based on this data and had completed regional Gross Depositional Environment and Common Risk Segment maps for PPLs 356, 357, 366 and 367.

During the year ended 30 June 2014 CSP (PNG) reported they had completed a feasibility study and reviewed the applicability of the Gravity Gradiometry technology as a possible precursor to seismic acquisition in PPL 366, 367 and 358 (SPB Annual Report, 30 June 2014).

In September 2016, South Pacific Resources entered into a commercial and technical alliance with Tamarind Management Sdn Bhd (www.tamarindmanagement.com), a private oil and gas company based in Kuala Lumpur (SPB ASX release, 27 September 2016).

SPB has not reported carrying out any data acquisition activities on any of the five PPLs, including but not limited to, commissioning of new geophysical surveys, acquisition of new seismic data, or having a material interest in the drilling of any wells.

3.2.2 Prior Exploration in PPL 356 & 357 – Offshore Gulf of Papua

Previous petroleum exploration in the Dibiri (PPL 356) and Hiri (PPL 357; Figure 11) permits includes regional 2D seismic data of various vintages; while modern multi-client seismic and geophysical data coverage exists for the area covering PPLs 356 and 357, there is no public record for purchase of this data by SPB. No wells have been drilled in the PPL areas to date; drilling in nearby and adjacent areas has targeted shallow Cenozoic carbonate reef plays (e.g. Pasca). No drilling to date has tested the deeper stratigraphic plays that are more typical of the Papuan Basin.

3.2.3 Prior Exploration in PPL 358 – Offshore Cape Vogel Basin

Previous petroleum exploration in the Cape Vogel Basin commenced in 1928 with the drilling of three shallow wells, Kuluia-1, -2 and -3, located on the Vogel Peninsula (Figure 12). The Kukuia-2 well was the deepest well and encountered oil and gas shows prior to reaching a total depth of 310 m. Two further wells were drilled in 1973, Goodenough-1 and Nubiam-1, to test Miocene reef buildups (Figure 13). The wells failed to record hydrocarbon shows and reached total in basement at 2,835 m and 2,366 m respectively.

Amoco Australia acquired 2,500 km of 2D seismic data in 1972-73, and a further 1,000 km was acquired by Texaco Exploration Co. This existing seismic data over the block provide a widely spaced regional grid of poor to moderate quality data. The wide spacing of these seismic lines renders them of limited use in detailing potentially drillable traps. Additional limited modern multi-client seismic exists for PPL 358; there is no public record for purchase of this data by SPB.

3.2.4 Prior Exploration in PPL 366 & 367 – Onshore PNG

Previous petroleum exploration in the onshore PPLs has been limited to the Biwai Licence (PPL 366) and in the low relief part of the Turama Licence (PPL 367; Figure 14; Figure 15). The Biwai PPL has some coverage of 1970's vintage 2D seismic data of fair quality. This seismic data in PPL 366 provides a subsurface tie to the Goari-1 well located in the east of the block, which was drilled by Esso in 1979 and reached a total depth of 3,138 mKB in Mesozoic sandstones. The Goari-1 well confirmed the presence of a top seal and the presence of multiple reservoirs with the Toro Sandstone as the primary target. Published cross sections based on seismic interpretation indicate that Goari-1 was drilled close to a significant fault.

The Turama-1 well was drilled by Oxy in 1997 without seismic control at the northern termination of one of the original seismic lines. The Turama feature that was the target of the well may therefore not have been

adequately tested given that the major associated topographic high is offset to the north and east of the drilling location (Figure 14; Figure 15).

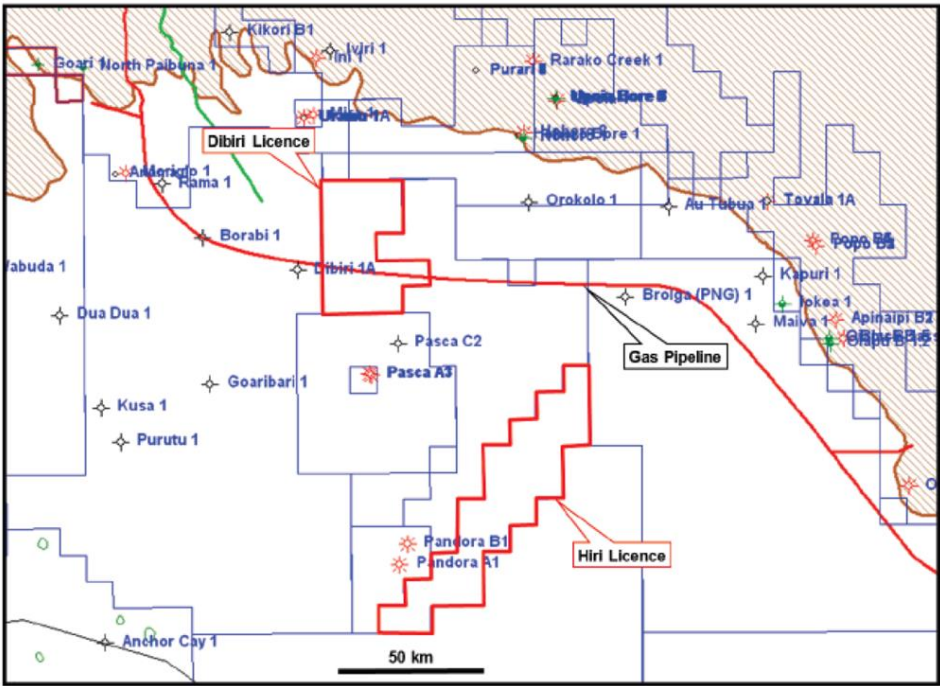


Figure 11: Sea floor map across Dibiri and Hiri Licences

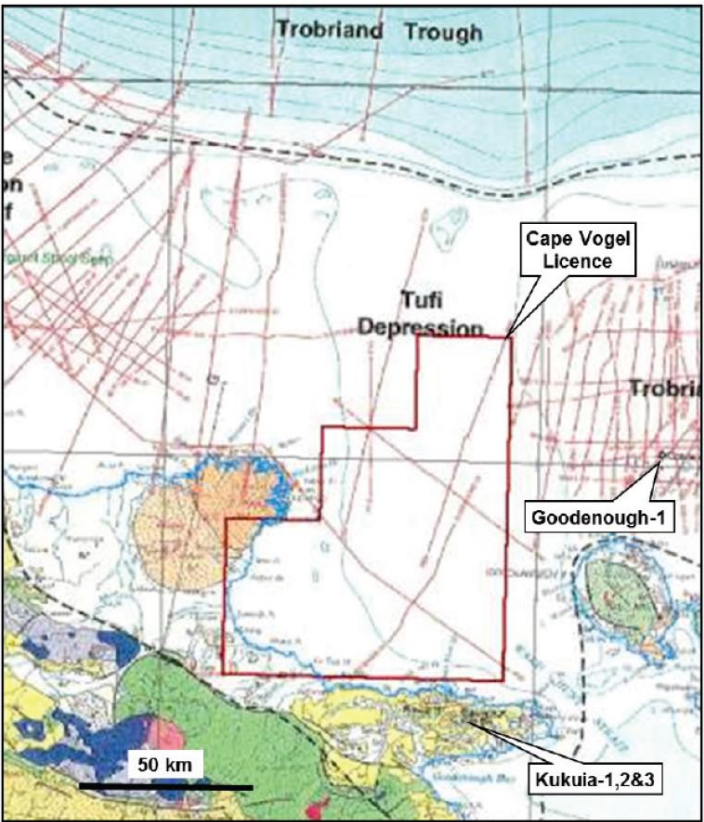


Figure 12: Well and seismic database (SPB) – Cape Vogel Licence

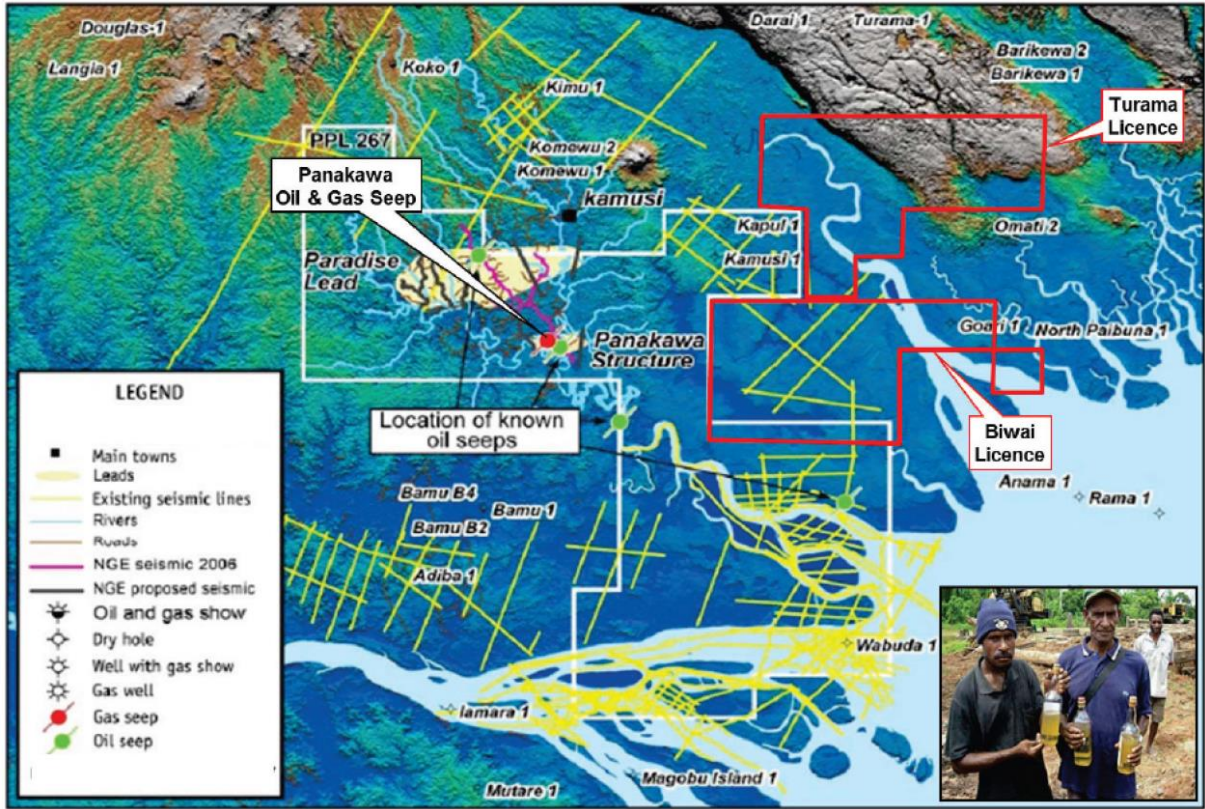


Figure 14: Location of Biwai and Turama Licences in relation to regional topographic relief, seismic and well data, and petroleum plays.

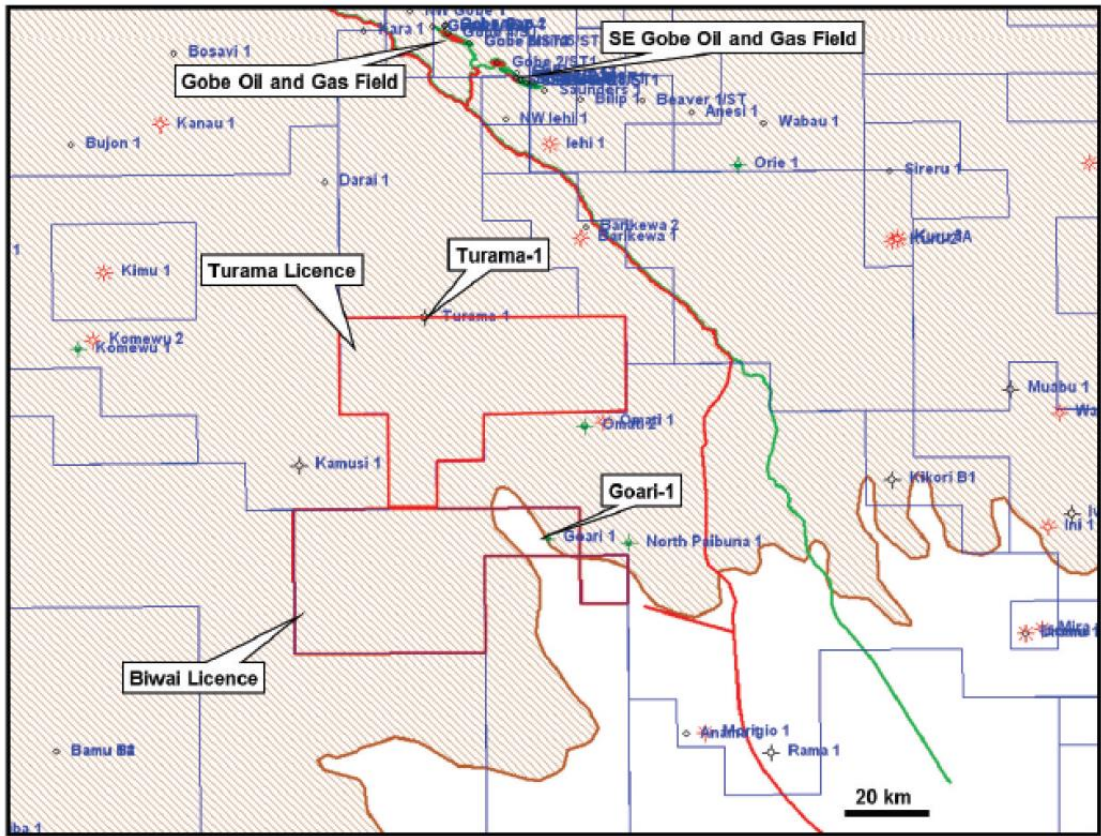


Figure 15: Location map – Biwai and Turama Licences

3.3 Geology and Prospectivity

3.3.1 PPL 356 & 357 – Offshore Gulf of Papua

PPL 356 and 357 are located offshore in the Gulf of Papua close to a number of potentially commercial gas discoveries. PPL 356 is in shallow water, less than 200 m deep, while PPL 357 straddles the present day shelf break extending from 200 m water depth into deep water in excess of 1,000 m (Figure 10).

The eastern margin of the Gulf of Papua marks the boundary between two crustal terranes. The Dibiri Licence, the western of the two PPLs, is located in the Gulf of Papua overlying the eastern Papuan Basin and Paleozoic to early Mesozoic basement of the Fly Platform (e.g. Home et al., 1990; Davies, 2012), consistent with the onshore PPLs held by SPB (Figure 10). The Hiri Licence, located on the eastern shelf of the present day Gulf of Papua, approximates the boundary between the basement provinces of the Papuan Basin and the offshore plateaus (here the Eastern Plateau) of the northern Coral Sea (Figure 16). The offshore plateaus are thought to also comprise Paleozoic to early Mesozoic continental basement, but this has not been tested.

During the Late Cretaceous, the northeastern margin of the Australian continental crust experienced a widespread, northwest to southeast rifting event that led to extension of the continental plateaus and formation of the Paleogene Coral Sea ocean basin (Weissel and Watts, 1979; Ott and Mann, 2015). In the Gulf of Papua a related postrift thermal sag phase began in the early Eocene, and combined with northward drift of the wider Australian plate into warmer waters, resulted in widespread carbonate growth that extended across shallower areas of western Gulf of Papua and Fly platform, while pelagic sedimentation dominated in deeper water (Figure 16; Pigram and Symonds, 1993; Ott and Mann, 2015).

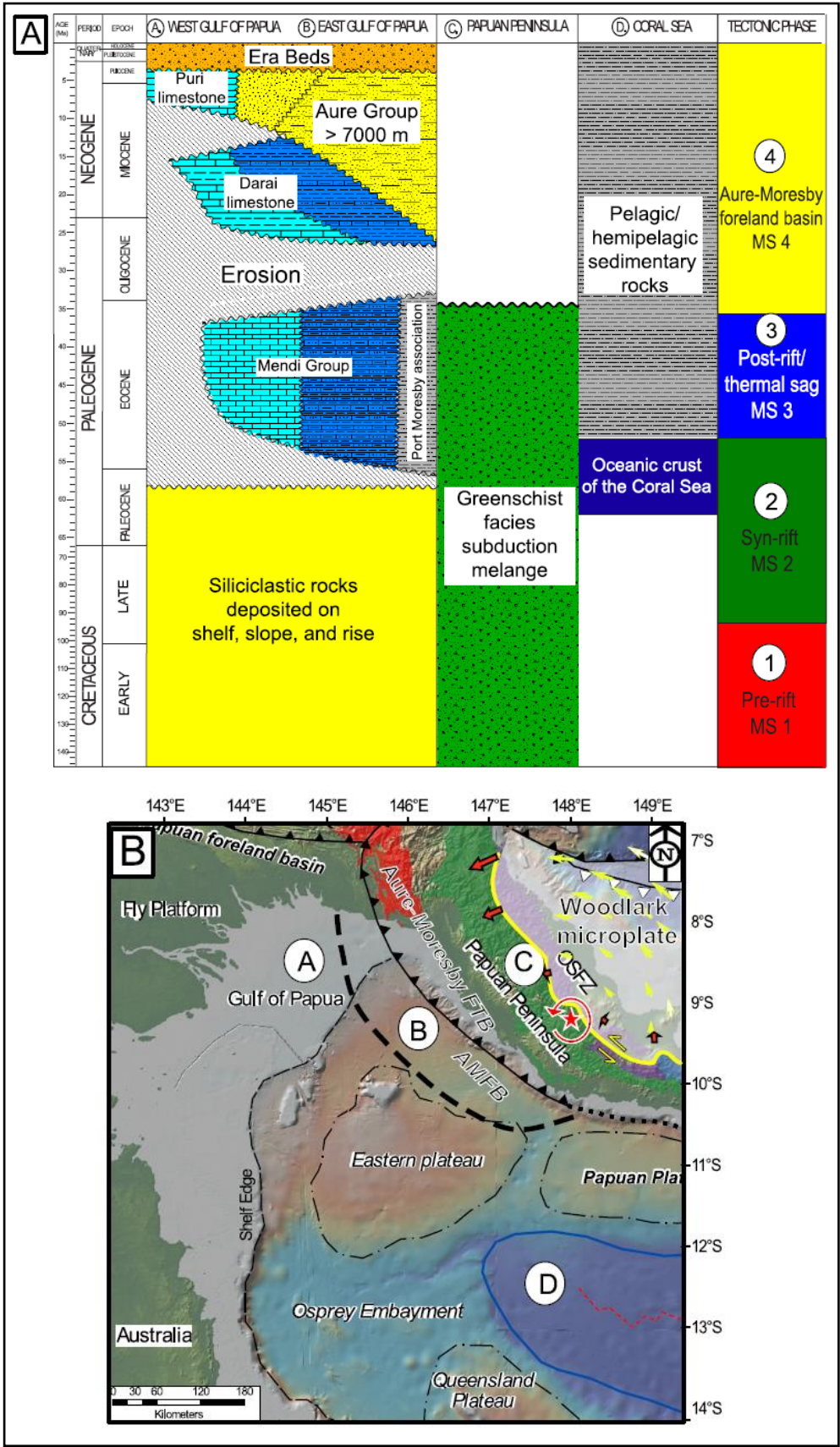
From the middle Miocene, continental collision and uplift of the New Guinea Orogen resulted in a switch in sedimentation patterns in the Gulf of Papua (Holm et al., 2015). As a result, sedimentation across the Fly Platform and Gulf of Papua underwent an abrupt and major stratigraphic transition from a passive margin setting dominated by carbonate deposition, to a foreland basin setting dominated by siliciclastic deposition with terrigenous source areas located on the Papuan mainland (Figure 16; Pigram et al., 1989).

The geology of the offshore Gulf of Papua is dominated by proven gas-prone Late Cenozoic petroleum systems in plays of Miocene age and younger (e.g. Pasca; Figure 17). These gas fields are contained within carbonate pinnacle reef reservoirs that grew on basement blocks from the Eocene, following rifting of the Coral Sea. These offshore gas fields accumulated in Miocene age carbonate reef reservoirs buried beneath the efficient regional Plio-Pleistocene age fine grained clastic top-seal. Although the carbonate play type has proven to be successful in the area, it is unlikely that this play type can be matured for drilling in the licence areas due to a lack of recognised reef development inside the permit areas.

The play types that are potentially present in the SPB held PPLs are the early Pliocene channel levee stratigraphic plays and the late Pliocene basin floor fans. The Flinders-1 and Hagana-1 discoveries, 32 km and 25 km west of PPL 357 is an example of such a play type. These deepwater Pliocene and Pleistocene age sandstones were drilled during early 2013 by Oil Search Ltd. The results suggest sandstone reservoirs are present in this segment of the Papuan Basin, but these fields are yet to be developed or proven to be economically viable.

Deeper plays equivalent to Mesozoic Papuan Basin-type plays are considered prospective in the deep water areas of the northern Coral Sea. The Jurassic and Cretaceous age rocks that host the onshore petroleum systems are thought to have been mostly eroded during a thermal uplift phase prior to opening of the Coral Sea Basin in latest Cretaceous to Palaeocene times, however, this is yet to be tested by drilling.

The offshore Gulf of Papua licences, PPL 356 and 357, while interesting are not considered prospective for proven Miocene-Pliocene carbonate reef-type petroleum plays, which is the established play type in the region. Sufficient data is not available at present to establish if these licences are prospective for Pliocene channel or fan plays, and the existence of offshore PNG Mesozoic plays is yet to be proven.



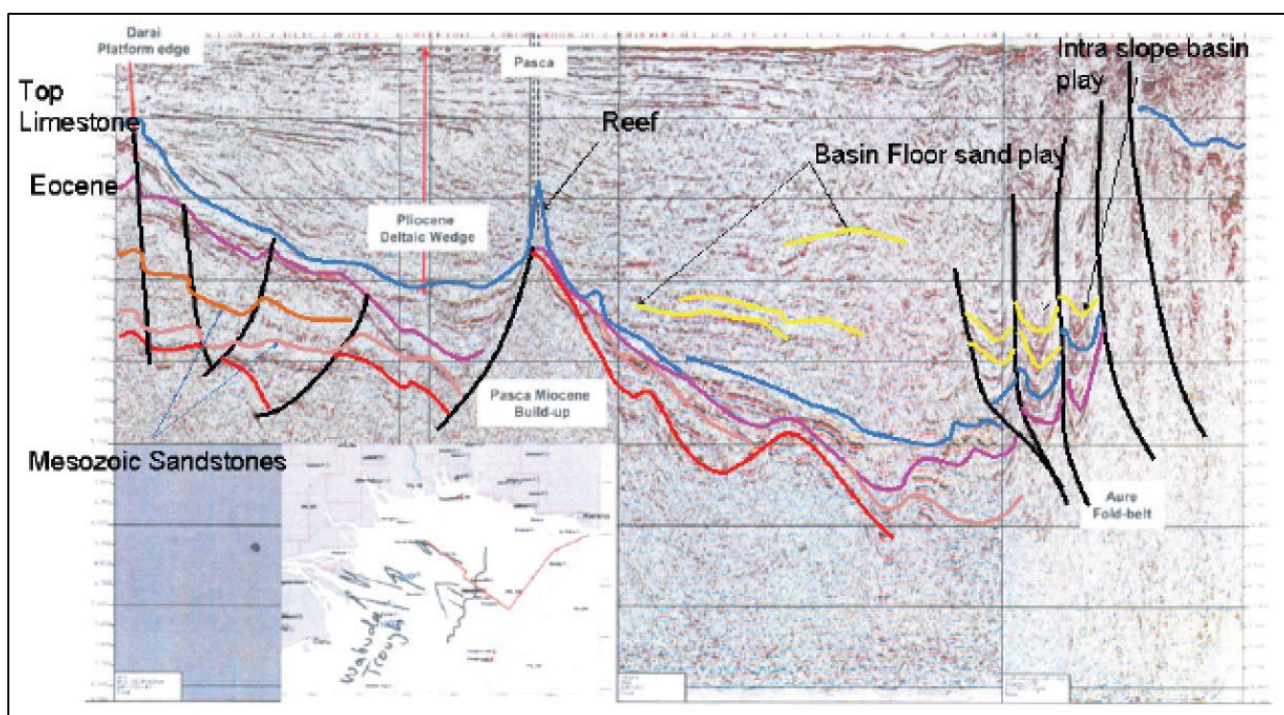


Figure 17: Regional seismic line showing a variety of play types in the Gulf of Papua.

3.3.2 PPL 358 – Offshore Cape Vogel Basin

PPL 358 is located in the Cape Vogel Basin (Figure 12; Figure 18). Much of the 6,070 km² license is in the deepwater frontier Tufi sub-basin where no exploration wells have been drilled. A number of natural oil and gas seepages have been reported in the basin and these remain to be substantiated.

The basement of the region underlying the offshore Cape Vogel/Trobriand basins are interpreted as a lower section of felsic gneisses overlain by the ophiolitic Papuan Ultramafic Body (PUB) (Little et al., 2007; Fitz et al., 2013), both of which have been intruded by Neogene anatectic magmatism (Fitz et al., 2013). Early Miocene (possibly late Oligocene) lauga volcanic rocks at the base of Goodenough-1 well from the basal volcanics in the basin, which is overlain by the early to middle Miocene Castle Hill Unit and Woruka Unit (Figure 13; Figure 19). Syn-rift growth wedges thicken northward toward normal faults, which demonstrate that the sequence was deposited during a north-south rifting event (Figure 20; Fitz et al., 2013). Siltstone, claystone, and volcanoclastic sediments equivalent to the Woruka unit and the Castle Hill unit were deposited in a deepwater setting in the Trobriand basin; these are now exposed on the Vogel Peninsula (Fitz et al., 2013).

The middle to late Miocene Nubiam Shale Unit overlies the Woruka and Castle Hill units and was initially deposited in water depths >800 m that shoaled upward through the late Miocene as the basin filled (Fitz et al., 2013). Uplift of the southern and northern margins of the Trobriand basin occurred during a late Miocene shortening phase; the early Miocene normal faults were reactivated or inverted to deform the basin stratigraphy into anticlinal folds over the inverted normal faults (Figure 20).

A distinctive change in paleogeography and depositional facies at 8.4 Ma marked the switch from a deep-water setting to a shallow-water setting of islands, lagoons, algal reefs, swamps, and river deltas (Fitz et al., 2013). Sandstones of the Ruaba Unit, as well as conglomerate of the Kwiminage Formation penetrated in Goodenough-1 and sandstone, claystone, and biomicrite of the Awaitapu Formation in Nubiam-1 characterise this stage in basin evolution (Figure 13; Figure 19). This timing is interpreted to mark uplift and unroofing of the D'Entrecasteaux Islands (Baldwin and Ireland, 1995; Fitz et al., 2013). Finer sediments in the Awaitapu

Formation from Nubiam-1 are interpreted as the more distal equivalent of this facies (Fitz et al., 2013). The Kiriwina Limestone overlies this units in a subsiding shallow marine setting (Fitz et al., 2013).

The Cape Vogel Basin is characterised by a very low geothermal gradient. Accordingly, for petroleum generation and migration to occur the syn-rift sequence must be sufficiently deeply buried that if source rocks are present, they are likely to be thermally mature. Regional gravity data indicate that the basement deepens rapidly to the west of Goodenough-1, which is supported by seismic data (Figure 21; Fitz et al., 2013). The seismic pick for top basement in the northern portion of the PPL 358 block indicates a depth greater than 5 km suggesting a substantial sediment thickness and the possibility of thermal maturity sufficient for oil and gas generation.

The presence of mature source rocks is supported by thermogenic gas encountered and analysed in the 1999 Ocean Drilling Programme well 1108 to the east of PPL 358. Unfortunately, the paucity and wide spacing of existing seismic data obtained by SPB do not allow for detailed prospect-scale mapping. However, SPB have identified several potential trap types including reefs (like those at the Pasca & Pandora gas fields in the Gulf of Papua), deepwater marine turbidite sandstone stratigraphic pinch-out traps and large deepwater inversion related anticlines.

The existing wells in the area, the Goodenough-1 and Nubiam-1 wells (Figure 13; Figure 19) reached total depths of 2,835 m and 2,366 m respectively and intersected all the potential play elements; prospective source rocks in the middle to late Miocene Woruka Unit (shales and claystones), Castle Hill Unit (carbonates) and Nubiam Shale, reservoir rocks in the Ruaba Unit (sandstone) and Awaitapu Formation (sandstone), and seal rocks such as the shale member of the Awaitapu Formation. However, the wells failed to record hydrocarbon shows and failed to provide evidence of an active petroleum system in the basin.

Additionally, the Cape Vogel Basin, and in particular the area of PPL 358, suffer from an increased uncertainty in the maturity or potential disruption to an active petroleum system due to the proximity to both active volcanism to the west characterised by the Cape Nelson and Mt Victory volcanic rocks, and the active and rapid exhumation of high-pressure metamorphic rocks of the D'Entrecasteaux Island Complex immediately east and expressed as a basement high underlying the PPL (Figure 18; Figure 20).

The petroleum potential of the Cape Vogel Basin has seen limited assessment to date. Consequently, the key elements of the petroleum system (source, reservoir, and seal) as well as the presence of viable traps remain to be adequately quantified. The basin is therefore a frontier basin from a petroleum exploration perspective.

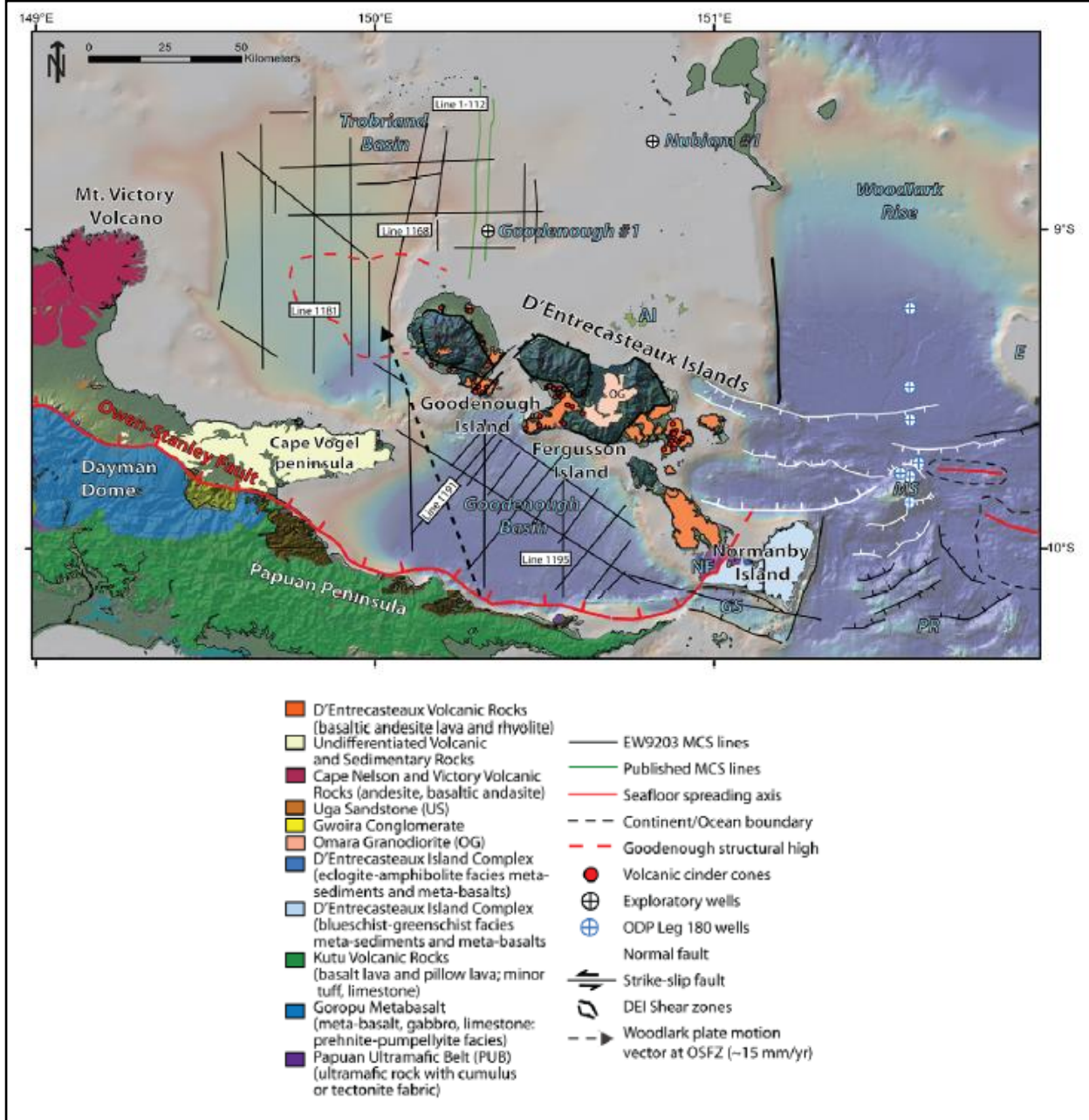


Figure 18: Map of the Cape Vogel-Trobriand Basin area showing 2D seismic data, well locations, and onshore geology; (Fitz et al., 2013).

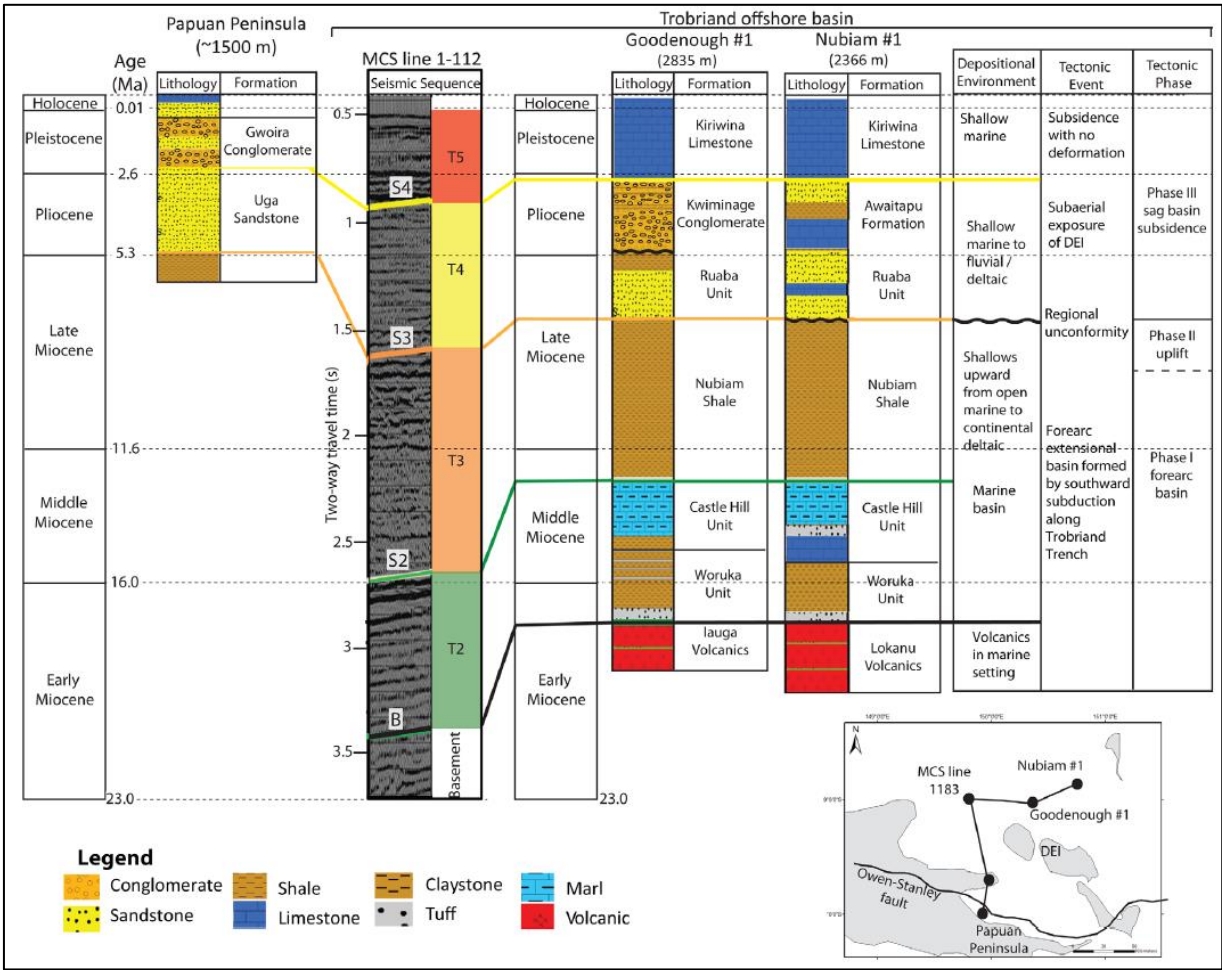


Figure 19: Correlation of stratigraphy of the Cape Vogel Basin between the Papuan Peninsula and the Goodenough-1 and Nubiam-1 wells; (Fitz et al., 2013).

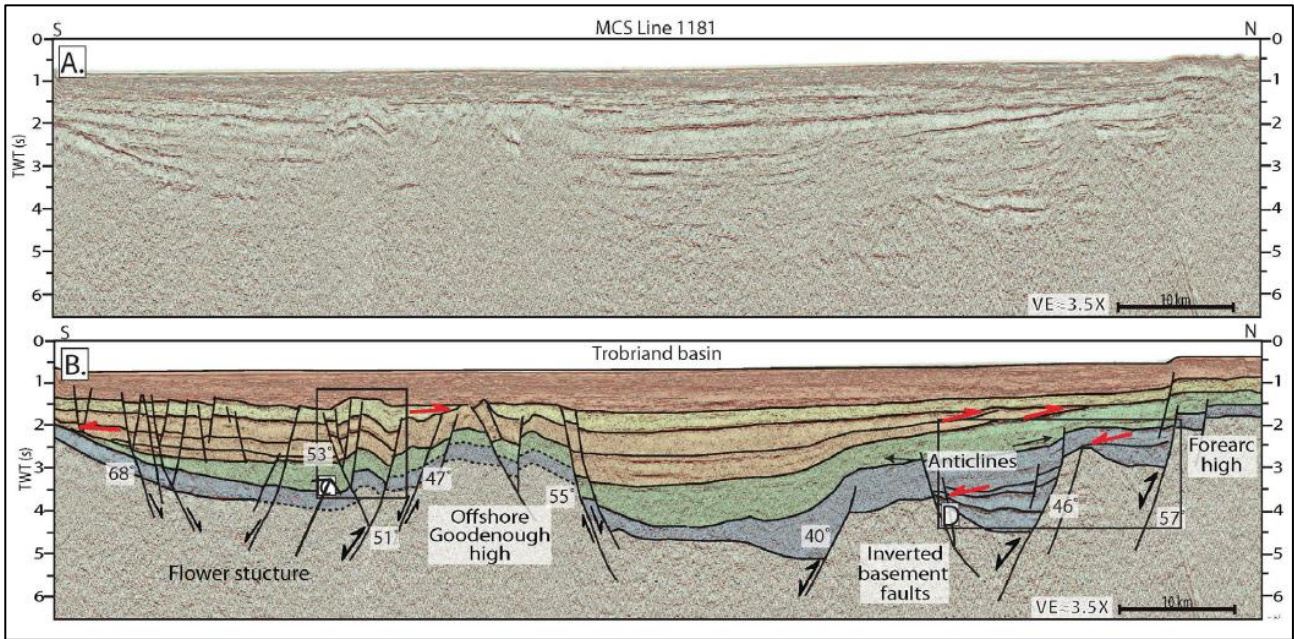


Figure 20: Interpreted south-north seismic section (Fitz et al., 2013). The line in indicated in Figure 18 and extends south-north in the location of PPL 358.

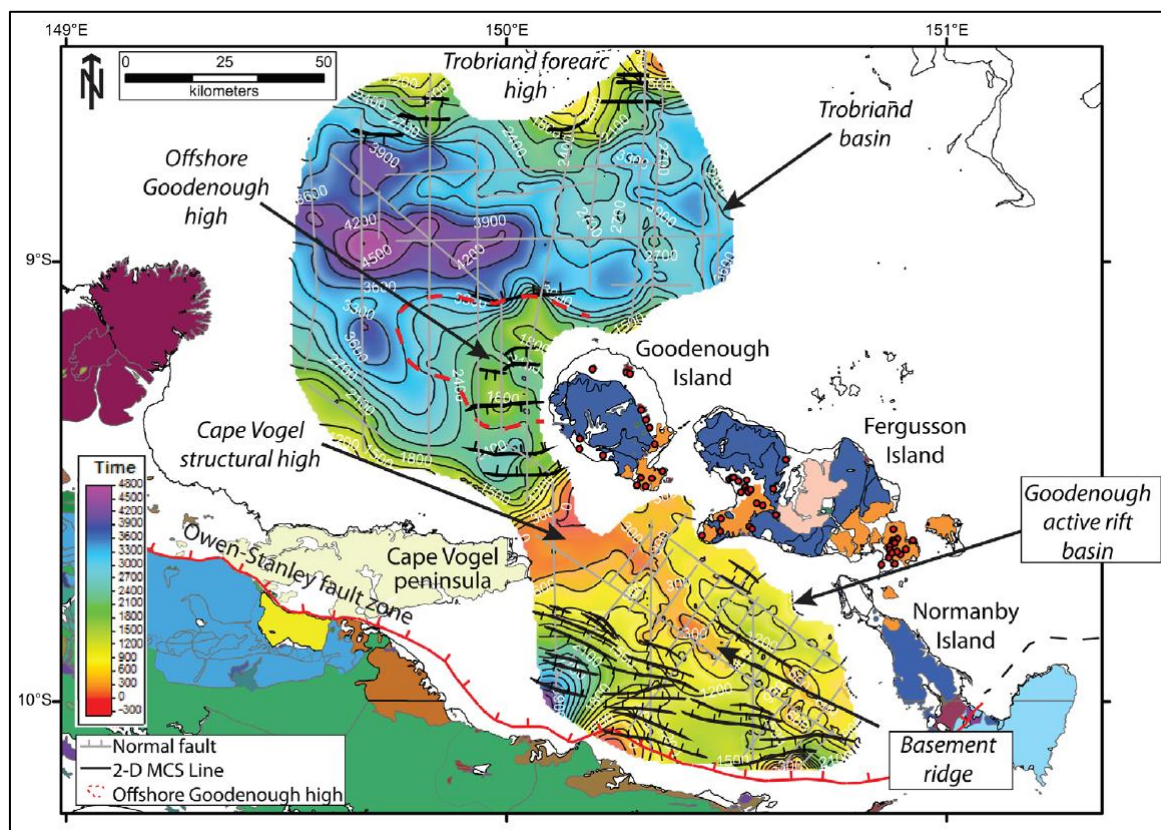


Figure 21: Map showing total thickness of basin sediment in two-way travel time (ms) (Fitz et al., 2013).

3.3.3 PPL 366 & 367 – Onshore PNG

The onshore PPLs 366 and 367 are located on the Turama River delta onshore in the Gulf of Papua. The licences are within the eastern Papuan Basin. This part of the Papuan Basin overlies an Australian continental pre-rift megasequence of Palaeozoic metamorphics and Permo-Triassic granitoids (Home et al., 1990; Davies, 2012). Continental break-up in the Middle to Upper Triassic is characterised in the stratigraphic record by a series of Middle to Upper Triassic sediments and volcanics, the Kana Volcanics and Bol Arkose (Home et al., 1990). Continental break-up was followed by a sag phase marked by siliciclastic sedimentation through the Late Jurassic and Cretaceous. Within this succession, Early-Middle Jurassic rift and break-up sediments deposited on the subsiding continental shelf include the Magobu Formation, Balimbu Greywacke, and Barikewa Formation; the Middle to Late Jurassic Imburu Formation, Koi-iange Formations, and the Maril Shale that forms laterally equivalent interval. The Early Cretaceous shallow marine quartzose Toro Sandstone marks a period of lower relative sea-levels, which is overlain by Cretaceous marine mudstone of the Ieru Formation (Home et al., 1990; Davies, 2012).

Northward drift of the wider Australian plate into warmer waters, resulted in widespread carbonate growth from the Eocene that extended across shallower areas of the Gulf of Papua and Fly platform (Figure 16; Pigram and Symonds, 1993; Ott and Mann, 2015). While this record of carbonate accumulation is preserved in the eastern Papuan Basin (e.g. Eocene Yala Limestone, Mendi Group; Miocene Darai Limestone; Home et al., 1990; Ott and Mann, 2015), much of this material was either not deposited or was subsequently eroded in the central Papuan Basin (e.g. Mahoney et al., 2019). From the middle Miocene, continental collision and crustal shortening resulted in inversion of pre-existing extensional basement structures beneath the Papuan Basin and formation of the New Guinea Orogen (Holm et al., 2015). This led to a switch in sedimentation patterns across the Fly Platform and the Gulf of Papua (Holm et al., 2015). As a result, sedimentation underwent an abrupt and major stratigraphic transition from a passive margin setting dominated by carbonate deposition, to a foreland basin setting, dominated by siliciclastic deposition with terrigenous

source areas located on the Papuan mainland (Era and Strickland formations; Figure 16; Pigram et al., 1989; Davies, 2012; Mahoney et al., 2019).

At present, the PPLs cover part of a northwest-southeast trending faulted foreland hinge zone, located over the Komewu Fault. This structure marks a boundary in the regional basement and stratigraphic structure with the Omati Trough to the north and Komewu High to the south (Figure 22, Figure 23; e.g. Home et al., 1990; Mollan and Blackburn, 1990). SPB have proposed that the Omati Trough is likely to be the local source kitchen for any hydrocarbons migrating up regional dip and north-westward into PPL 366 and 367.

The petroleum components of the eastern Papuan Basin include, a) potential source material in Early-Middle Jurassic rift and break-up sediments (Magobu Formation, Balimbu Greywacke, and Barikewa Formation), Middle to Late Jurassic Imburu Formation, Koi-iange Formations, and the lower Maril Shale as the lateral equivalent, b) Early Cretaceous shallow marine quartzose Toro Sandstone reservoir rocks, and c) an overlying impervious Cretaceous marine mudstone of the Ieru Formation and the capping Miocene Darai Limestone (Home et al., 1990; Mollan and Blackburn, 1990).

In assessing prospectivity, SPB has interpreted the presence of multiple reservoir targets below regional sealing shales, including the Early Cretaceous to Jurassic Alene, Toro, Iagifu, Koi iange and Magobu Formations, to provide multiple potentially stacked exploration targets. The presence of proven reservoirs, source and seal elements in the nearby Barikewa and Iehi gas fields indicates a low to moderate risk in the presence of the play elements in PPL 366. However, these are yet to be proven as successful petroleum exploration targets. Exploratory drilling to date has not been structurally optimised; trap definition and effectiveness also represent the principal components of exploration risk emphasising the importance subsurface constraining data and structural controls.

The prospectivity of the onshore Papua New Guinea PPLs has been evaluated by SPB based on its assessment of open-file data. The Turama Lead (PPL 367; Figure 24) identifies that a possible structural trap may be present at Toro and deeper reservoir levels up-dip from, and independent of the results of the Turama-1 well in the north of the license (Figure 15; Figure 22). A second, similar yet apparently smaller East Turama Lead has also been identified to the east closer to the Barikewa Gas Field. The Gamma River Lead (PPL 366 and 367; Figure 22, Figure 23) is a fault-bounded prospect mostly within and along the boundary of PPL 366 and 367. The potential lead is interpreted in the elevated footwall of an east-west trending extensional fault associated with a local convex jog in the regional Komewu Fault Zone (Figure 22). The regional structural dip in the footwall south of the bounding fault is interpreted by SPB to be dipping to the south-eastward into the Omati Trough (yellow arrow in Figure 22). Due to the paucity of seismic lines the key risk that has been identified for the Gamma River Lead is whether the feature closes to the west and constitutes a petroleum trap.

The onshore Gulf of Papua region that hosts SPB's onshore PNG petroleum licences can be considered an underexplored area within the wider Papuan Basin, however, the area has been widely covered by early stage exploration activities. Regional-scale seismic data covers much of the area with smaller areas of more detailed surveys, and exploratory wells are situated throughout the area. The leads proposed by SPB are considered by CSA Global to be viable prospects, albeit at a very early exploration stage, and while the stratigraphy of the region does support the presence of petroleum systems, historic wells within the permits have not identified any significant hydrocarbon shows.

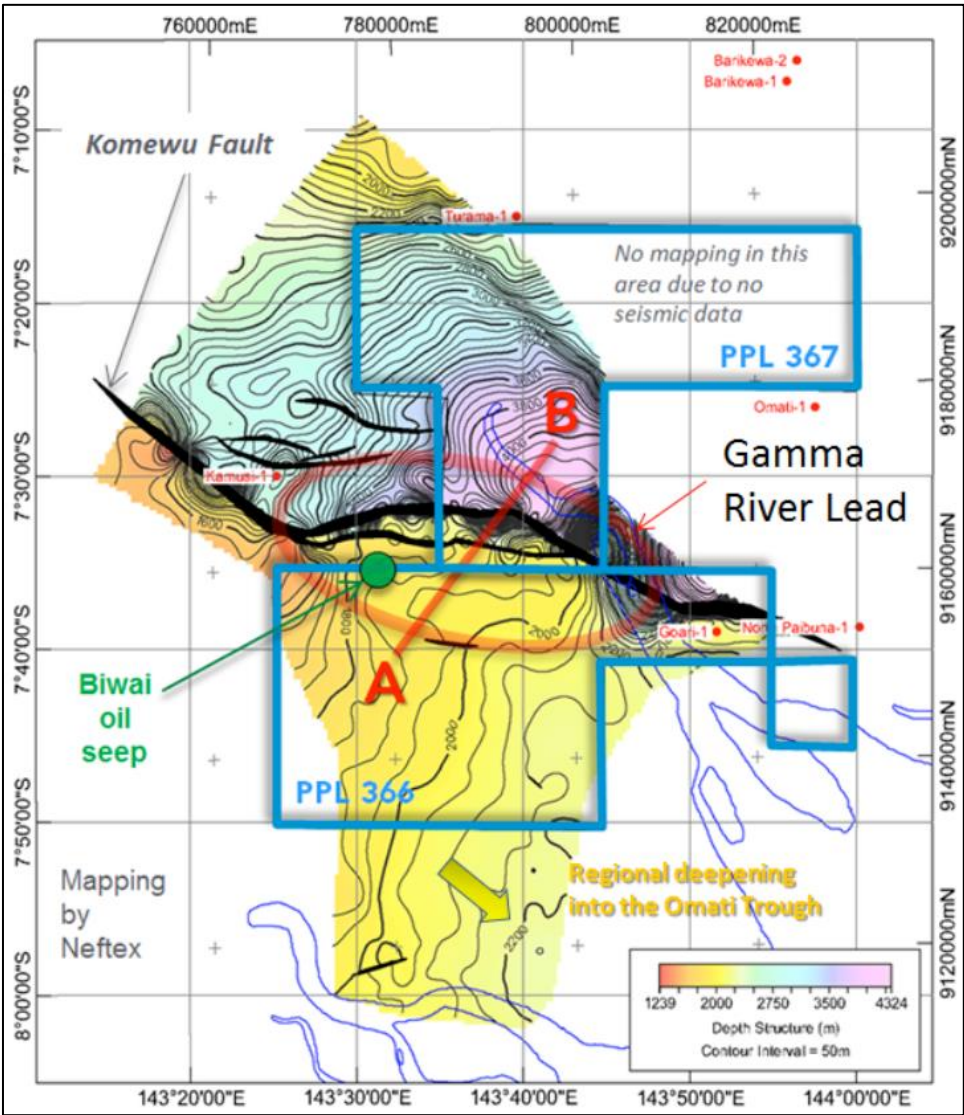


Figure 22: Top Toro seismic structure beneath PPLs 366 and 367.

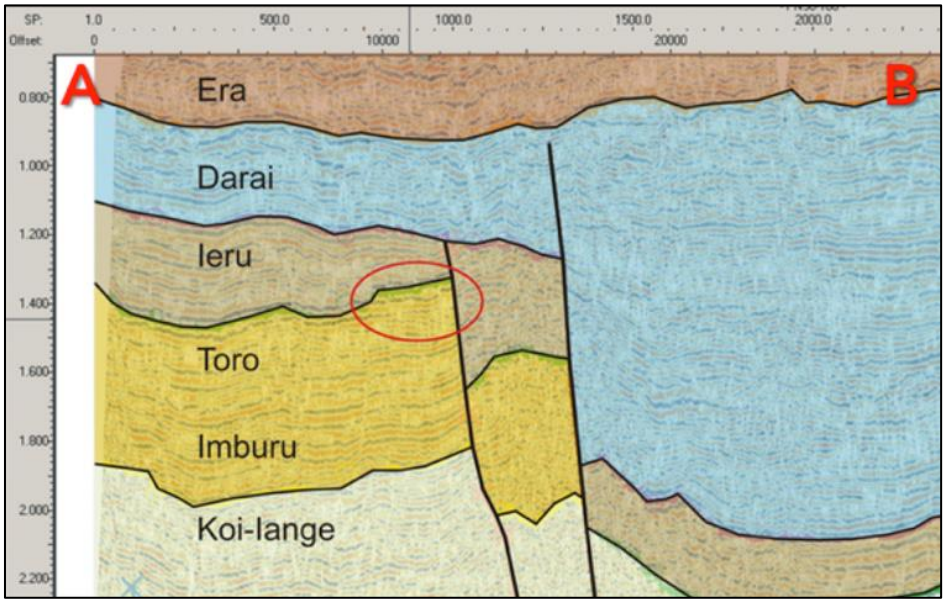


Figure 23: Interpreted seismic section across PPLs 366 and 367 (Line A-B in Figure 22).

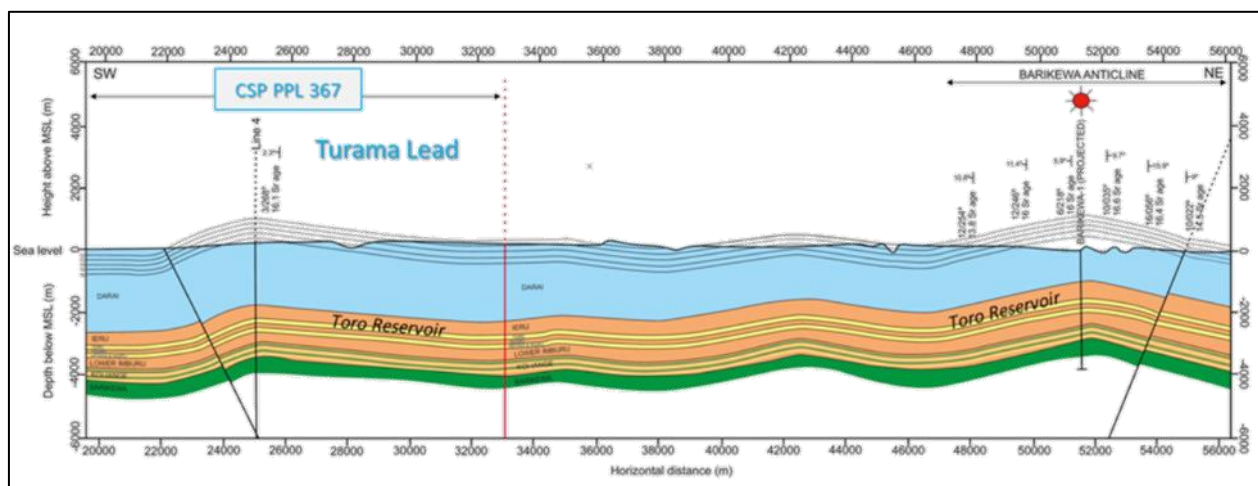


Figure 24: Turama (PPL 367) lead to Barikewa Field geological cross section.

3.4 Summary and Discussion

The five petroleum prospecting licences were obtained by SPB, trading as Coral Sea Petroleum Ltd (CSP), following the acquisition of Indo Pacific Energy Pty Ltd ("IPE") and its subsidiary Coral Sea Petroleum (PNG) Limited ("CSP (PNG)"), which was completed on 3 August 2012. To date the work carried out by SPB has comprised sourcing available open-file well, seismic and other data in all five of its PPLs, a regional interpretation based on this data, and preliminary evaluation of the PPLs. SPB has not reported carrying out any data acquisition activities beyond compilation of open-file data.

At the time of PPL acquisition the work and expenditure program for each of the PPLs set out an indicated approved work and expenditure program/condition to be undertaken. This work program is outlined in the ASX release dated 29 May 2012 (Orchid Capital Ltd Prospectus, 29 May 2012). The lack of work carried out for each PPL suggests the work and expenditure program has not been met. CSA Global cannot confirm the status of tenure and it is unclear if SPB retains any rights to these PPLs.

The work to date on the five PPLs is considered very early exploration activity and has comprised the development of conceptual petroleum plays and leads based on obtained open-file data; only limited de-risking work has been carried out on these models. Where historic exploration drilling exists in the vicinity of the proposed leads, results have not been favourable and were not followed up with subsequent work. CSA Global considers that SPB's Papua New Guinea petroleum prospecting licences to be of low prospectivity for significant petroleum discoveries based on the work to date, regardless of the tenure status.

CSA Global also considers that the PPLs held by SPB are predominantly outside of the regions that are the current exploration focus of petroleum explorers, namely, the main trend of the Papuan Fold and Thrust to the northeast with proven discoveries and development (e.g. Figure 10), and the potential deep water frontier Palaeozoic-early Mesozoic plays of the Eastern and Papuan plateaus in the northern Coral Sea. The location of the PPLs may therefore make it difficult to achieve successful fundraising or farmout agreements.

4 Risks

4.1 Mandiri Heavy Mineral Sands Project

CSA Global consider that the Mandiri resource is a low confidence Inferred Mineral Resource, primarily because of the small number of drill holes which have defined the mineralisation. Further exploration drilling is required to reduce the level of risk in the Mineral Resource. Significant improvements in the quality of the samples, the compositing of samples, the limited number of composites submitted for analysis, the analysis methods, and the grade modelling methods would be required to report to the level of Indicated Mineral Resources, along with significantly increased drill density.

SPB have defined an exploration target below the Mineral Resource and an area of exploration potential between the margins of the current resource and the tenement boundary. As with any exploration activity, there is a risk that further exploration will not define a Mineral Resource.

The deposit is currently being exploited through small-scale mining activity, with effective mineral processing occurring at SPB's mineral processing facility located nearby. While this does provide support for the potential of the deposit for eventual economic development, significant investment in further mineral exploration, testwork and development studies will be required to determine whether this deposit is suitable to support an economically feasible formal mining operation.

The current licence for the Mandiri tenement only allows the sale of zircon. Other potentially valuable heavy minerals (such as rutile, ilmenite, or monazite) are not currently available to the holder of the tenement. There is potential value being forgone until approval to exploit other minerals is obtained.

There are also potential risks involved in obtaining timely approvals to expand mining activities into forestry areas.

4.2 Papua New Guinea Oil and Gas Projects

At the time of PPL acquisition, the work and expenditure program for each of the PPLs set out an indicated approved work and expenditure program/condition to be undertaken. This work program is outlined in the ASX release dated 29 May 2012 (Orchid Capital Ltd Prospectus, 29 May 2012). The lack of work carried out for each PPL suggests the work and expenditure program has not been met. CSA Global cannot confirm the status of tenure and it is unclear if SPB retains any rights to these PPLs.

5 Valuation of Indonesian Mineral Assets

5.1 Previous Valuations

CSA Global is not aware, nor has CSA Global been made aware, of any previous valuations of the Assets under consideration.

5.2 Valuation Approach

Valuation of Mineral Assets is not an exact science; and a number of approaches are possible, each with varying positives and negatives. While valuation is a subjective exercise, there are a number of generally accepted procedures for establishing the value of Mineral Assets. CSA Global consider that, wherever possible, inputs from a range of methods should be assessed to inform the conclusions about the Market Value of Mineral Assets.

The valuation is always presented as a range, with the preferred value identified. The preferred value need not be the median value and is determined by the practitioner based on their experience.

Refer to Appendix 1 for a discussion of Valuation Approaches and Valuation Methodologies, including a description of the VALMIN classification of Mineral Assets.

In forming an opinion on the Market Value of the Mineral Assets, the valuation approach adopted by CSA Global has been to rely primarily on Market-based methods (primarily the Comparative Transaction method). This was based on the declared Mineral Resources on the property (Table 10).

Table 10: Valuation basis and methods employed

Mineral Asset	Classification	Contained HM (Mt)	Valuation methods
Inferred Mineral Resource	Advanced Exploration	8.8	Comparative Transactions, Yardstick
HM Exploration Target	Advanced Exploration	1.0 to 2.1	Comparative Transactions, Geological Risk

In considering the likely value of the Mineral Resources, CSA Global has employed the Yardstick method as a non-corroborative order of magnitude crosscheck on the valuation using the Comparative Transactions method.

In considering the likely value of the HM Exploration Target, CSA Global has employed the Geological Risk method as a non-corroborative order of magnitude crosscheck on the valuation using the Comparative Transactions method.

The choice of valuation methods employed was dictated by the exploration stage of the assets and the availability of information.

The Valuation Basis employed by CSA Global is Market Value, as defined by the VALMIN Code (2015). The Valuation Date is 25 September 2019. The currency is United States dollars (US\$) unless otherwise stated.

Project values are expressed on a 100% basis.

CSA Global understands that the relevant licences (tenure and export) under which the Mandiri Project operates are restricted to zircon. CSA Global has therefore not assigned any value to heavy minerals other than zircon, including gold.

On the basis of CSA Global's technical assessment of the PNG oil and gas tenements, the outcomes of which are summarised in Section 3.4, CSA Global concludes that the PNG petroleum assets of SPB currently have only negligible value, and the market value of these tenements are not likely to be material within the context of the post-transaction value of SPB as a whole.

5.3 Commodity Market and Pricing

Mineral sands products are not exchange traded, and there is therefore no readily sourced representative traded prices for mineral sands products (Iluka, 2018). Mineral sands were traditionally sold on the basis of long-term contracts, which resulted in an extended period of relative price stability and only modest price growth (Figure 25).

Iluka (2018) notes that Iluka introduced a new zircon pricing and payments framework in 2015, which entails an Iluka benchmark or contract price and spot pricing arrangements.

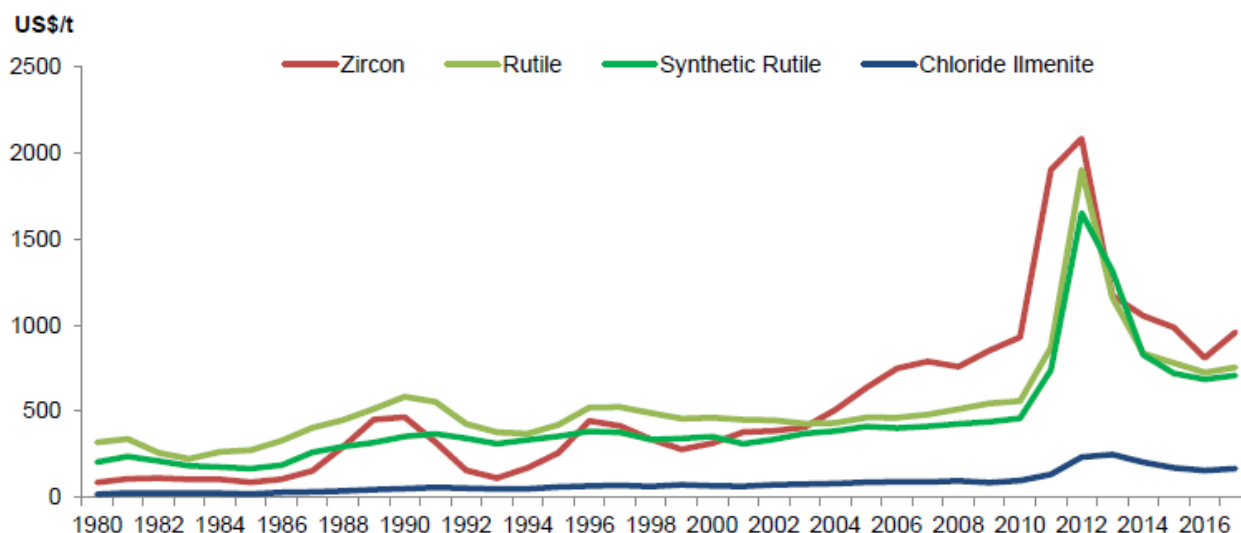


Figure 25: Selected annual mineral sands prices
Source: Iluka (2018)

Consensus Economics (2019) notes that the price of zircon, which is mainly used in ceramics and tiles, is set under long term contracts, and Iluka, which is the world's largest zircon miner, is the most influential in setting a benchmark price (Figure 26). Iluka's Eucla basin mine in Australia is mined principally for zircon, unlike the majority of other mines, where zircon is a coproduct of rutile and ilmenite.

Iluka quotes a weighted average received price of US\$1,522/t FOB for Zircon (Premium and Standard) for the first half of 2019 (Iluka, 2019).

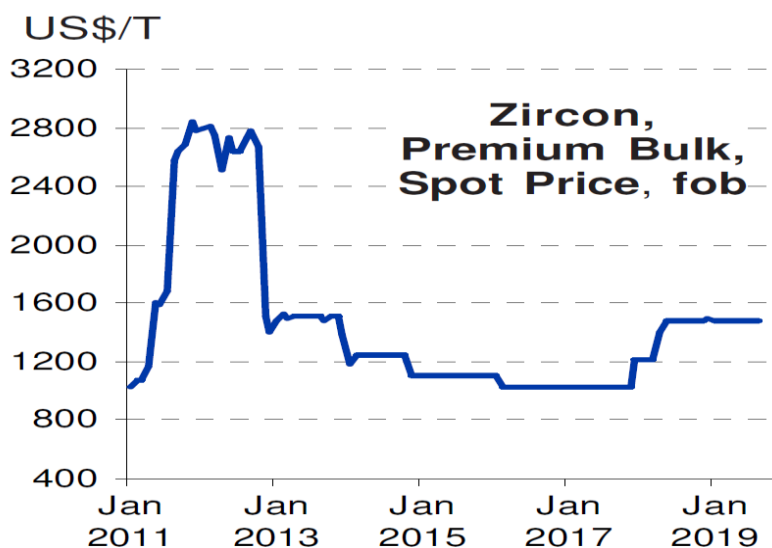


Figure 26: Zircon price history
Source: Consensus Economics (2019)

5.4 Comparative Transactions

The transactions considered were announced post-January 2014, and sufficient information on the transaction and material projects were available in the public domain for the analysis of the transactions.

In analysing the transactions in terms of US\$/t of contained heavy minerals, all amounts were converted to US\$ at the relevant exchange rate at the time of the transaction announcement. Share consideration was treated as the equivalent cash value using share prices at the time of the transaction, unless the shares were issued at a particular deemed price.

CSA Global considered recent market transactions that it deemed useful in assessing the likely market value of the Mandiri mineral resource. CSA Global did not find any transactions involving resources that are entirely comparable to the Mandiri deposit, hence resources that were deemed analogous in various ways (as discussed below), were considered. Comparative transactions were identified that involved zircon as a significant component, or transactions involving mineral sands projects with zircon as part of the mineralogical suite (with caveats as noted below).

In assessing the likely market value of the Mandiri heavy mineral resource, CSA Global identified eight recent transactions (within the past 5 years), summarised in Table 22 and analysed in Table 23 of Appendix 2.

Two of these transactions involved the Beravina Project, which is a hard rock (pegmatite) hosted zircon deposit in Madagascar. This was considered as it is one of the few zircon deposits that has transacted recently, and while the likely capital and operating costs for any project development would be different to a typical mineral sands project, the key product is the same.

The only other zircon-dominant resource that has transacted recently is the Grand Cote deposit in Senegal, although this was an operating heavy mineral sands mine, and the business that was acquired in the transaction included an ilmenite processing facility in Norway.

Two other transactions involved operating heavy mineral sands mines – the Sierra Rutile operations in Sierra Leone, and the Keysbrook leucoxene and zircon operation in Australia. Note that the Keysbrook operation was in voluntary administration at the time of the sale.

The remaining transactions all involved ilmenite-dominant heavy mineral sands resources, including the Toliara Project in Madagascar, the Jangamo Project in Mozambique and the Mannar Project in Sri Lanka. CSA Global included these projects in the analysis because they are pre-development mineral sands projects in developing countries, and hence provide an insight into the market appetite for these type of projects.

An analysis of this transaction dataset in terms of price paid per tonne of contained heavy mineral sand is provided in Table 11.

Table 11: Analysis of transactions involving heavy mineral sands resources

	All transactions	Excluding Beravina	Excluding operations	Excluding operations and Beravina
No. of transactions	8	6	5	3
Minimum (US\$/t)	0.14	0.14	0.14	0.14
Maximum (US\$/t)	29.31	29.31	8.08	4.25
Mean (US\$/t)	8.97	10.48	2.98	2.02
Median (US\$/t)	5.63	5.63	1.66	1.66
Weighted Average (US\$/t)	9.66	9.71	1.64	1.61

From this analysis, CSA Global has exercised professional judgement in selecting appropriate valuation factors (implied values) for the Mandiri Mineral Resource, as follows:

- Low factor: US\$0.14/t
- High factor: US\$4.50/t
- Preferred factor: US\$1.65/t

The low factor has been informed by the lowest transaction from the dataset, which was a non-operating mineral sands deposit (Jangamo).

CSA Global has exercised professional judgement in selecting a high factor that has been rounded up from the maximum transaction value of the three non-operating heavy mineral sands resources. This is just below the median for the entire dataset, and consistent the values of the operating zircon mines at Grand Cote and Keysbrook when the stage of the Mandiri Project is considered.

The preferred factor is rounded from the median value and the weighted average value when considering the transactions apart from those involving operating mines. These values remain unchanged when the Beravina hard rock deposit is excluded as well, suggesting that this is a valid market price for non-operating mineral sands projects.

Note that this market analysis considers the implied US\$/t value on the basis of total contained heavy minerals acquired, irrespective of the mineralogy or the proportion of the heavy minerals that are recovered and sold in concentrates.

CSA Global has adopted this approach due to the limited number of transactions that were identified in the past five years, such that it was not possible to derive meaningful factors for implied US\$/t of saleable zircon projects alone.

In CSA Global's professional judgement, this approach is acceptable for the following reasons:

- Dividing the implied transaction price by the total heavy mineral content results in valuation factors that would be more conservative (lower) than those derived by considering only the saleable content.
- Zircon has a higher spot price than ilmenite or rutile, so applying these factors to only the zircon content of the Mandiri resource would effectively be applying a further discount to the resource, which is not justified.
- Likewise in CSA Global's professional judgement, a premium to account for the difference in value between zircon and ilmenite or rutile would not be appropriate, as this would apply to the entire heavy mineral sand content of the deposit, and therefore not take into account the fact that only the zircon content can be sold.

Applying the selected valuation factors discussed above to the total contained heavy mineral content of the Mandiri heavy mineral sands resource results in the valuation range and preferred value summarised in Table 12.

Table 12: Valuation of Inferred Mineral Resource considering Comparative Transactions

Contained HM (Mt)	Factors (US\$/t)			Value (US\$ million)		
	Low	High	Preferred	Low	High	Preferred
8.82	0.14	4.50	1.65	1.2	39.7	14.6

The valuation has been compiled to an appropriate level of precision and minor rounding errors may occur

CSA Global notes that this analysis delivers a very wide range of values. This range reflects the limited set of transactions available for the analysis, and in CSA Global's opinion is not inappropriate given the early stage of the project and low classification Mineral Resources combined with a producing plant (albeit small scale). Nonetheless the outcome reflects the available information from the market approach and provides an important input to the overall value opinion below.

CSA Global further notes that the wide range of values requires cross check methods to inform any final opinions of the likely project value; this provided below.

5.4.1 Value of the Exploration Target

CSA Global also utilised the preferred valuation factor derived from the analysis above in forming an opinion on the likely market value of the heavy mineral sand Exploration Target on the Mandiri tenement.

The Exploration Target of 25 to 30 Mt at 4 to 7% HM implies a range of 1.0 to 2.1 Mt contained HM. CSA Global note that the Exploration Target does not constitute a Mineral Resource, and there is no certainty that further exploration will result in the delineation of a Mineral Resource of a similar magnitude. To account for this risk, CSA Global has applied a risk factor of 0.5 to the valuation range for the Exploration Target.

Applying the valuation factor of US\$1.65/t contained HM and a risk factor of 0.5 to the contained HM range implied by the Exploration Target, results in the valuation range and preferred value summarised in Table 13.

Table 13: Valuation of HM Exploration Target considering Comparative Transactions

Low Contained HM (Mt)	High Contained HM (Mt)	Valuation Factor (US\$/t)	Risk Factor	Value (US\$ million)		
				Low	High	Preferred
1.00	2.10	1.65	0.5	0.83	1.73	1.28

The valuation has been compiled to an appropriate level of precision and minor rounding errors may occur

5.5 Yardstick Crosscheck

CSA Global used the Yardstick method as an order of magnitude check on the valuation of the Mandiri Mineral Resource that was completed using comparative transactions. The Yardstick order of magnitude check is simplistic (e.g. it is very generalised and does not address project-specific value drivers but takes an “industry-wide” view). It provides a non-corroborative valuation check on the primary comparative transactions valuation method, allowing CSA Global to assess the reasonableness of the derived comparative transactions valuation and whether there are any potential issues with their preferred primary valuation method.

For the Yardstick order of magnitude check, CSA Global used a spot price of US\$1,522/t for zircon, as reported by Iluka (2019).

Commonly used Yardstick factors for base and precious metals are:

- Inferred Mineral Resources: 0.5% to 1% of spot price
- Indicated Mineral Resources: 1% to 2% of spot price.
- Measured Mineral Resources: 2% to 5% of spot price

For a commodity like heavy mineral sands, Yardstick factors can be one to two orders of magnitude lower, due to how the market prices different commodity projects. More value is attributed to convex commodities at an earlier project stage, for example gold and nickel sulphide projects, whereas for concave commodities like bauxite, nickel laterite, potash and heavy mineral sands these are valued considerably lower until the project is closer to production (Trench and Packay, 2012).

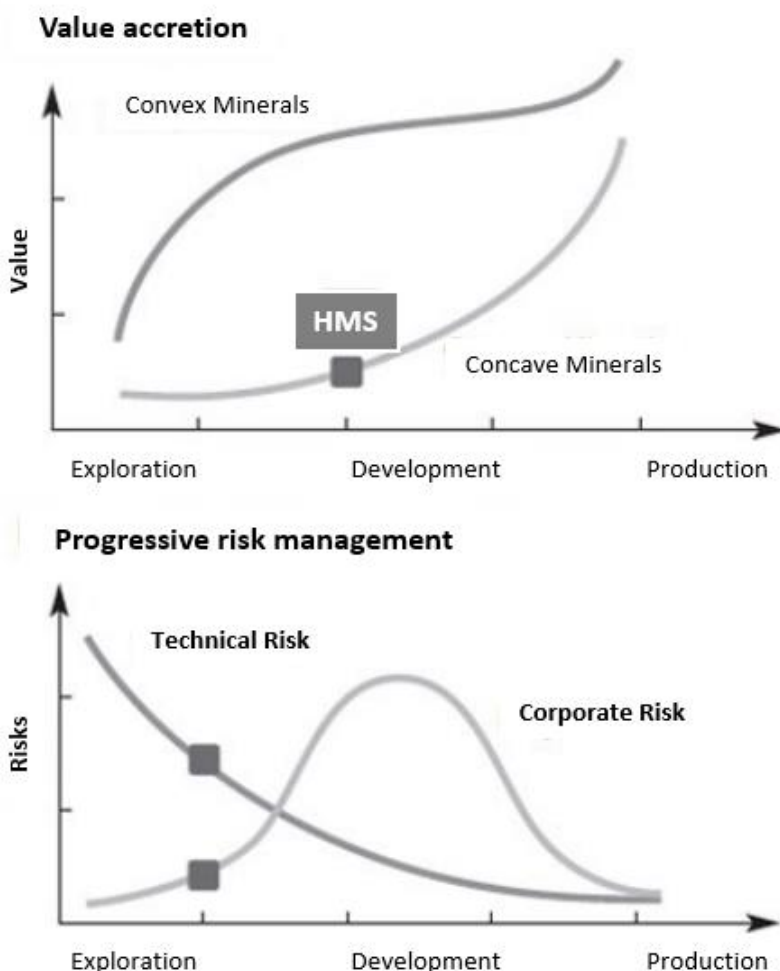


Figure 27: Convex and Concave Minerals
Source: Modified from Trench and Packey (2012)

Therefore, CSA Global used professional judgement in selecting Yardstick factors of 0.1% to 0.2% of the spot price for zircon.

Applying the spot price and yardstick factors discussed above to the contained zircon in the Mandiri Inferred Mineral Resource, CSA Global conducted a Yardstick order of magnitude valuation crosscheck, as summarised in Table 14.

Table 14: Order of Magnitude Crosscheck of Zircon Mineral Resource considering Yardstick method

Contained zircon (Mt)	Spot Price (US\$/t)	Yardstick Factors (% of spot price)		Value (US\$ million)		
		Low	High	Low	High	Preferred
6.0	1,522	0.1	0.2	9.1	18.3	13.7

The valuation has been compiled to an appropriate level of precision and minor rounding errors may occur

CSA Global note that this is of a similar order of magnitude as the valuation based on comparative transactions, and conclude that the Yardstick valuation crosscheck supports the primary valuation method.

5.6 Geological Risk Method

CSA Global used the Geological Risk Method, as described in Appendix 1, as a non-corroborative order of magnitude crosscheck on the valuation of the HMS Exploration Target valuation.

In the Geological Risk Valuation method the value of a project at a given stage of knowledge/development is assessed based on the potential value of the project at a later stage of development, discounted by the probability of the potential value of the later stage being achieved, and considering the estimated cost of progressing the project to the next stage.

The Target Value considered by CSA Global was based on the preferred US\$/t valuation factor for contained HM, discussed in Section 5.4 above, applied to the contained HM from the Exploration Target ranges of tonnes and grade. This Target Value therefore represents the likely market value of a mineral resource equivalent in size to the Exploration Target.

CSA Global has assumed that the cost of further exploration, drilling, analyses, interpretation and estimation required to define a Mineral Resource from the current Exploration Target will be US\$0.5 million. Based on the analysis reported by Lord *et al.* (2001), CSA Global has assumed that the probability of successfully defining a Mineral Resource from the Exploration Target is 0.58.

Applying these input assumptions to the contained HM implied by the Exploration target ranges, results in the valuation range summarised in Table 15.

Table 15: Order of Magnitude Crosscheck of Exploration Target considering Geological Risk Method

	Target contained HM (Mt)	Current Stage	Stage C			Stage D
			Current Value (US\$ million)	Probability	Cost (US\$ million)	Target Value (US\$ million)
Low	1.00	C	0.67	0.58	0.50	1.65
High	2.10	C	1.72	0.58	0.50	3.47
Preferred			1.19			

The valuation has been compiled to an appropriate level of precision and minor rounding errors may occur

CSA Global note that this is of a similar order of magnitude as the valuation based on comparative transactions, and conclude that the Geological Risk valuation crosscheck supports the primary valuation method.

6 Valuation of PNG Petroleum Assets

The five petroleum prospecting licences were obtained by SPB, trading as Coral Sea Petroleum Ltd (CSP), following the acquisition of Indo Pacific Energy Pty Ltd ("IPE") and its subsidiary Coral Sea Petroleum (PNG) Limited ("CSP (PNG)"), which was completed on 3 August 2012.

To date the work carried out by SPB has comprised sourcing available open-file well, seismic and other data in all five of its PPLs, a regional interpretation based on this data, and preliminary evaluation of the PPLs. SPB has not reported carrying out any data acquisition activities beyond compilation of open-file data.

At the time of PPL acquisition, the work and expenditure program for each of the PPLs set out an indicated approved work and expenditure program/condition to be undertaken. This work program is outlined in the ASX release dated 29 May 2012 (Orchid Capital Ltd Prospectus, 29 May 2012). The lack of work carried out for each PPL suggests the work and expenditure program has not been met. CSA Global cannot confirm the status of tenure and it is unclear if SPB retains any rights to these PPLs.

The work to date on the five PPLs is considered very early exploration activity and has comprised the development of conceptual petroleum plays and leads based on obtained open-file data; only limited de-risking work has been carried out on these models. Where historic exploration drilling exists in the vicinity of the proposed leads, results have not been favourable and were not followed up with subsequent work. CSA Global considers that SPB's Papua New Guinea petroleum prospecting licences to be of low prospectivity for significant petroleum discoveries based on the work to date, regardless of the tenure status.

CSA Global also considers that the PPLs held by SPB are predominantly outside of the regions that are the current exploration focus of petroleum explorers, namely, the main trend of the Papuan Fold and Thrust to the northeast with proven discoveries and development (e.g. Figure 10), and the potential deep water frontier Palaeozoic-early Mesozoic plays of the Eastern and Papuan plateaus in the northern Coral Sea. The location of the PPLs may therefore make it difficult to achieve successful fundraising or farmout agreements.

Lastly, the political situation in PNG remains volatile, with a recent change in government increasing uncertainty for the resource sector in PNG. This sovereign risk, combined with the physical, health and safety challenges in PNG, in combination with the technical factors discussed above, lead CSA Global to conclude that the PNG petroleum assets of SPB currently have only negligible value and are not material post transaction.

7 Valuation Opinion

CSA Global's opinion on the likely market value of the Mandiri tenement, as at 25 September 2019, is summarised in Table 16 and illustrated in Figure 28 and Figure 29. CSA Global stress that this is an opinion on value, and not an absolute value, which can only be tested by going to market.

Table 16: CSA Global opinion on likely market value of Mandiri tenement, as at 25 September 2019.

	Low (US\$ million)	High (US\$ million)	Preferred (US\$ million)
Mineral Resource	7.00	21.00	14.00
Exploration Target	0.75	1.75	1.25
Tenement Total	7.75	22.75	15.25

Values quoted on a 100% basis.

The valuation has been compiled to an appropriate level of precision and minor rounding errors may occur.

The preferred value for the Mineral Resource is consistent between the primary method (comparative transactions) and the order of magnitude crosscheck (Yardstick), as indicated in Figure 28. This value has been adopted as the preferred value for the mineral resource.

CSA Global has exercised professional judgement in selecting a valuation range of 50% above and below the preferred value, to yield a symmetrical range. CSA Global notes that this restricts the very wide range derived from the comparative transactions method to a more meaningful range, while still reflecting CSA Global's view on the risks associated with a very early stage Mineral Resource and a project still requiring substantial work to advance.

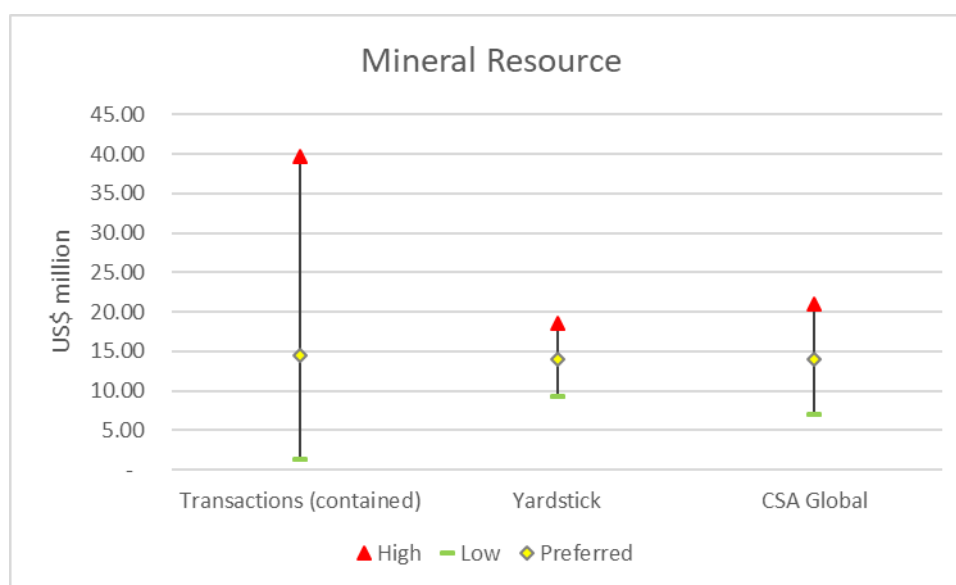


Figure 28: Valuation Range for the Mandiri Mineral Resource

Likewise, the preferred value for the Exploration Target is consistent between the primary method (comparative transactions) and the order of magnitude crosscheck (Geological Risk), as indicated in Figure 29. This value has been adopted as the preferred value for the Exploration Target.

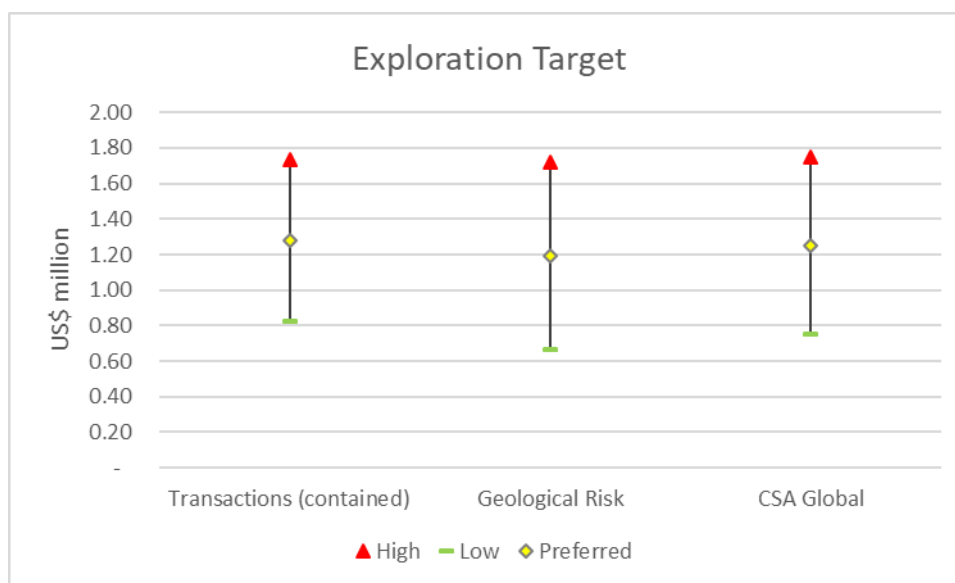


Figure 29: Valuation Range for the Mandiri Exploration Target

CSA Global has exercised professional judgement in selecting a valuation range of 40% above and below the preferred value, to yield a symmetrical range.

CSA Global notes that although this range is smaller than that applied to the value of the Mineral Resource above, it is consistent with the ranges derived in both valuation methods considered for the Exploration Target. CSA Global therefore considers a range of 40% above and below a preferred value to be appropriate in assessing the likely value of a mineral asset at this early stage. A wider range such as 50% would lead to a valuation range greater than the informing methods and so was not appropriate.

On the basis of CSA Global's technical assessment of the PNG oil and gas tenements, the outcomes of which are summarised in Section 3.4, CSA Global concludes that the PNG petroleum assets of SPB currently have only negligible value, and the market value of these tenements are not likely to be material within the context of the post-transaction value of SPB as a whole.

8 References

- Baldwin, S.L., Ireland, T.R., 1995. A tale of two eras: Pliocene-Pleistocene unroofing of Cenozoic and late Archean zircons from active metamorphic core complexes, Solomon Sea, Papua New Guinea. *Geology* 23, 1023-1026.
- Consensus Economics, 2019. *Energy & Metals Forecasts August 2019*.
- Chisholm, J. and Christiawan, Y., 2019. *Technical Assessment Report, Mandiri Project, Central Kalimantan, Republic of Indonesia*. Report Number WA19/05, prepared for South Pacific Resources Limited by Continental Resource Management, dated July 2019.
- Davies, H.L., 2012. The geology of New Guinea – the cordilleran margin of the Australian continent. *Episodes* 35.
- Fitz, G., Mann, P., 2013. Tectonic uplift mechanism of the Goodenough and Fergusson Island gneiss domes, eastern Papua New Guinea: Constraints from seismic reflection and well data. *Geochemistry, Geophysics, Geosystems*, doi: 10.1002/ggge.20208.
- Holm, R.J., Spandler, C., Richards, S.W., 2015. Continental collision, orogenesis and arc magmatism of the Miocene Maramuni arc, Papua New Guinea. *Gondwana Research* 28, 1117-1136.
- Home, P.C., Dalton, D.G., Brannan, J., 1990. Geological evolution of the Western Papuan Basin. In: Carman, G.J., and Carman, Z. (Eds), *Petroleum Exploration in Papua New Guinea: Proceedings of the First PNG Petroleum Convention*, Port Moresby.
- Iluka Resources Limited, 2018. *Mineral Sands Industry Information*. Prepared May 2015, updated November 2018. Available from: <https://www.iluka.com/investors-media/investor-toolkit>. Accessed 24 September 2019.
- Iluka Resources Limited, 2019. *Interim Report for the half-year ended 30 June 2019*. Released to the ASX 21 August 2019.
- Joint Ore Reserves Committee, 2012. *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition*. [online]. Available from <http://www.jorc.org> (The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia).
- Little, T.A., Baldwin, S.L., Fitzgerald, P.G., Monteleone, B., 2007. Continental rifting and metamorphic core complex formation ahead of the Woodlark spreading ridge, D'Entrecasteaux Islands, Papua New Guinea. *Tectonics* 26.
- Mahoney, L., McLaren, S., Hill, K., Kohn, B., Gallagher, K., Norvick, M., 2019. Late Cretaceous to Oligocene burial and collision in western Papua New Guinea: Indications from low-temperature thermochronology and thermal modelling. *Tectonophysics* 752, 81-112.
- Mollan, R.G., Blackburn, G.J., 1990. Petroleum potential of the Fly-Bamu deltas region. In: Carman, G.J., and Carman, Z. (Eds), *Petroleum Exploration in Papua New Guinea: Proceedings of the First PNG Petroleum Convention*, Port Moresby.
- Ott, B., Mann, P., 2015. Late Miocene to Recent formation of the Aure-Moresby foldthrust belt and foreland basin as a consequence of Woodlark microplate rotation, Papua New Guinea. *Geochemistry, Geophysics, Geosystems*, doi: 10.1002/2014GC005668.
- Pigram, C.J., Davies, P.J., Feary, D.A., Symonds, P.A., 1989. Tectonic controls on carbonate platform evolution in southern Papua New Guinea: Passive margin to foreland Basin. *Geology* 17, 199-202.
- Pigram, C.J., Symonds, P.A., 1993. Eastern Papuan basin—A new model for the tectonic development, and implications of petroleum prospectivity. In: Carman, G.J., and Carman, Z. (Eds), *Petroleum Exploration and Development in Papua New Guinea: Proceedings of the Second PNG Petroleum Convention*, Port Moresby.
- Sholeh, Adnan & Associates, 2019. *Legal opinion for a report on Mineral Concession (IUP OP /DPE/IX/2010) and enforceability of related exclusive operation and management agreement for South Pacific Resources Limited*. Legal opinion provided to South Pacific Resources, dated 31st July 2019.
- Trench, A and Packey, D 2012. *Australia's Next Top Mining Shares Understanding Risk and Value in Minerals Equities*. Major Street Publishing, 336pp.
- USGS, 2019 Mineral Commodity Summaries 2019. <https://www.usgs.gov/centers/nmic/zirconium-and-hafnium-statistics-and-information>

VALMIN, 2015, *Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code)*, 2015 edition. [online]. Available from <http://www.valmin.org> (The VALMIN Committee of The Australasian Institute of Mining and Metallurgy, and The Australian Institute of Geoscientists).

Weissel, J.K., Watts, B., 1979. Tectonic Evolution of the Coral Sea Basin. *Journal of Geophysical Research* 84, 4572-4582.

South Pacific Resources Limited ASX Releases

29 May 2012. Orchid Capital Ltd (to be renamed Coral Sea Petroleum Ltd) Prospectus.

30 June 2013. Coral Sea Petroleum Annual Report and Financial Statements for the Year Ended 30 June 2013.

30 June 2014. Coral Sea Petroleum Annual Report and Financial Statements for the Year Ended 30 June 2014.

27 September 2016. South Pacific Resources Limited Engages Complete Technical Team through Strategic Co-operation Agreement with Tamarind Management Sdn Bhd.

7 August 2019. South Pacific Resources Limited Agrees to Acquire Takmur Pte. Ltd.

9 Glossary

Below are brief descriptions of some terms used in this report. For further information or for terms that are not described here, please refer to internet sources such as Wikipedia www.wikipedia.org

Alluvium	Loose, unconsolidated (not cemented together into a solid rock) soil or sediment that has been eroded, reshaped by water in some form, and redeposited in a non-marine setting.
Anticline	A fold that is convex upward – an arch-like shape with the oldest beds at the core.
Anticlinorium	A large anticline on which minor folds are superimposed.
Commissioning Entity	The organisation, company or person that commissions a Public Report.
Competent Person	A minerals industry professional who is a Member or Fellow of the AusIMM or the AIG, or of a Recognised Professional Organisation (RPO), as included in a list available on the JORC and ASX websites. A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration, and in the activity which that person is undertaking.
Discounted cash flow	A valuation method used to estimate the attractiveness of an investment opportunity. DCF analyses use future free cash flow projections and discounts them, using a required annual rate, to arrive at present value estimates.
Exploration Results	includes data and information generated by mineral exploration programmes that might be of use to investors but which do not form part of a declaration of Mineral Resources or Ore Reserves.
Exploration Target	A statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.
Feasibility Study	a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are not necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.
Holocene	the current geological epoch. It began approximately 11,650 calendar years before present, after the last glacial period, which concluded with the Holocene glacial retreat.
Independent Expert Report	a Public Report as may be required by the Corporations Act, the Listing Rules of the ASX or other security exchanges prepared by a Practitioner who is acknowledged as being independent of the Commissioning Entity.
Indicated Mineral Resource	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
Inferred Mineral Resource	An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is

	based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
long-term price	The price for product sold or purchased under contract for multiple deliveries beginning after one year.
Market Value	The estimated amount of money (or the cash equivalent of some other consideration) for which the Mineral Asset should exchange on the date of Valuation between a willing buyer and a willing seller in an arm's length transaction after appropriate marketing wherein the parties each acted knowledgeably, prudently and without compulsion.
Measured Mineral Resource	A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
mineral	any naturally occurring material found in or on the Earth's crust that is either useful to or has a value placed on it by humankind, or both. This excludes hydrocarbons, which are classified as Petroleum.
Mineral Asset	All property including (but not limited to) tangible property, intellectual property, mining and exploration Tenure and other rights held or acquired in connection with the exploration, development of and production from those Tenures.
mineral project	any exploration, development or production activity, including a royalty or similar interest in these activities, in respect of Minerals.
Mineral Resource	A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
mineralisation	any single mineral or combination of minerals occurring in a mass, or deposit, of economic interest. The term is intended to cover all forms in which mineralisation might occur, whether by class of deposit, mode of occurrence, genesis or composition.
mining	all activities related to extraction of Minerals by any method (e.g. quarries, open cast, open cut, solution mining, dredging etc).
mining industry	the business of exploring for, extracting, processing and marketing Minerals
Miocene	the first geological epoch of the Neogene period and extends from about 23.03 to 5.332 million years ago (Ma).
Modifying Factors	Considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.
Net Present Value	The difference between the present value of cash inflows and the present value of cash outflows over a period of time. It is used in capital budgeting to analyse the profitability of a projected investment or project.
Ore Reserve	An Ore Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Ore Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

Paleogene	a geologic period and system that spans 43 million years from the end of the Cretaceous Period 66 million years ago (Mya) to the beginning of the Neogene Period 23.03 Mya.
Paludal deposit	refers to sediments that accumulated in a marsh environment.
Paralic	Said of deposits laid down on the landward side of a coast, in shallow fresh water subject to marine invasions. Thus, marine and nonmarine sediments are interbedded.
Pleistocene	the geological epoch which lasted from about 2,588,000 to 11,700 years ago, spanning the world's most recent period of repeated glaciations.
Practitioner	An Expert as defined in the Corporations Act, who prepares a Public Report on a Technical Assessment or Valuation Report for Mineral Assets. This collective term includes Specialists and Securities Experts.
Public Report	A report prepared for the purpose of informing investors or potential investors and their advisors when making investment decisions, or to satisfy regulatory requirements.
Securities Expert	Persons whose profession, reputation or relevant industry experience provides them with the authority to assess or value Securities in compliance with the requirements of the Corporations Act, ASIC Regulatory Guides and ASX Listing Rules.
Specialist Report	A report detailing a Technical Assessment and/or Valuation of Mineral Assets, prepared by a Specialist for use in an Independent Expert Report.
Specialist	Persons whose profession, reputation or relevant industry experience in a technical discipline (such as geology, mine engineering or metallurgy) provides them with the authority to assess or value Mineral Assets.
Spot price	Current delivery price of a commodity traded in the spot market.
Syncline	A fold in a sequence of rock layers in which the younger rock layers are found in the centre (along the axis) of the fold.
Technical Assessment	An evaluation prepared by a Specialist of the technical aspects of a Mineral Asset. Depending on the development status of the Mineral Asset, a Technical Assessment may include the review of geology, mining methods, metallurgical processes and recoveries, provision of infrastructure and environmental aspects.
Tenure	Any form of title, right, licence, permit or lease granted by the responsible government in accordance with its mining legislation that confers on the holder certain rights to explore for and/or extract agreed minerals that may be (or is known to be) contained. Tenure can include third-party ownership of the Minerals (for example, a royalty stream). Tenure and Title have the same connotation as Tenement.
Valuation Date	The reference date on which the monetary amount of a Valuation in real (dollars of the day) terms is current. This date could be different from the dates of finalisation of the Public Report or the cut-off date of available data.
Valuation Report	Expresses an opinion as to the monetary Value of a Mineral Asset but specifically excludes commentary on the value of any related Securities.
Valuation	The process of determining the monetary Value of a Mineral Asset at a set Valuation Date.
Value	The Market Value of a Mineral Asset.

10 Abbreviations and Units of Measurement

ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
AusIMM	Australasian Institute of Mining and Metallurgy
BAC	Base acquisition cost
CRM	Continental Resource Management
CSA Global	CSA Global Pty Ltd
DCF	Discounted Cash Flow
HM	Heavy mineral
HMS	Heavy mineral sand
ITAVR	Independent Technical Assessment and Valuation Report
LOM	life of mine
NPV	Net Present Value of future cashflows
QAQC	quality assurance and quality control (for sampling and assaying)
RBA	Reserve Bank of Australia
SPB	South Pacific Resources Limited
Stantons	Stantons International Securities Pty Ltd
VHM	Valuable heavy minerals
ha	hectares
km	kilometres
km ²	square kilometres
m asl	meters above sea level
mm	millimetres
tpm	tonnes per month

Appendix 1: Valuation Approaches

Valuation of Mineral Assets is not an exact science; and a number of approaches are possible, each with varying positives and negatives. While valuation is a subjective exercise, there are a number of generally accepted procedures for establishing the value of Mineral Assets. CSA Global consider that, wherever possible, inputs from a range of methods should be assessed to inform the conclusions about the Market Value of Mineral Assets.

The valuation is always presented as a range, with the preferred value identified. The preferred value need not be the median value and is determined by the Practitioner based on their experience and professional judgement.

Background

Mineral Assets are defined in the VALMIN Code³ as all property including (but not limited to) tangible property, intellectual property, mining and exploration tenure and other rights held or acquired in connection with the exploration, development of and production from those tenures. This may include the plant, equipment and infrastructure owned or acquired for the development, extraction and processing of Minerals in connection with that tenure.

Business valuers typically define market value as “The price that would be negotiated in an open and unrestricted market between a knowledgeable, willing, but not anxious buyer, and a knowledgeable, willing but not anxious seller acting at arm’s length.” The accounting criterion for a market valuation is that it is an assessment of “fair value”, which is defined in the accounting standards as “the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm’s length transaction.” The VALMIN Code defines the value of a Mineral Asset as its Market Value, which is “the estimated amount (or the cash equivalent of some other consideration) for which the Mineral Asset should exchange on the date of Valuation between a willing buyer and a willing seller in an arm’s length transaction after appropriate marketing where the parties had each acted knowledgeably, prudently and without compulsion”.

Market Value usually consists of two components, the underlying or Technical Value, and a premium or discount relating to market, strategic or other considerations. The VALMIN Code recommends that a preferred or most-likely value be selected as the most likely figure within a range after taking into account those factors which might impact on Value.

The concept of Market Value hinges upon the notion of an asset changing hands in an arm’s length transaction. Market Value must therefore take into account, inter alia, market considerations, which can only be determined by reference to “comparable transactions”. Generally, truly comparable transactions for Mineral Assets are difficult to identify due to the infrequency of transactions involving producing assets and/or Mineral Resources, the great diversity of mineral exploration properties, the stage to which their evaluation has progressed, perceptions of prospectivity, tenement types, the commodity involved and so on.

For exploration tenements, the notion of value is very often based on considerations unrelated to the amount of cash which might change hands in the event of an outright sale, and in fact, for the majority of tenements being valued, there is unlikely to be any “cash equivalent of some other consideration”. Whilst acknowledging these limitations, CSA Global identifies what it considers to be comparable transactions to be used in assessing the values to be attributed to Mineral Assets.

³ Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code) 2015 Edition. Prepared by the VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists.

Valuation Methods for Mineral Assets

The choice of valuation methodology applied to Mineral Assets, including exploration licences, will depend on the amount of data available and the reliability of that data.

The VALMIN Code classifies Mineral Assets into categories that represent a spectrum from areas in which mineralisation may or may not have been found through to Operating Mines which have well-defined Ore Reserves, as listed below:

- **“Early-stage Exploration Projects”** – tenure holdings where mineralisation may or may not have been identified, but where Mineral Resources have not been identified.
- **“Advanced Exploration Projects”** – tenure holdings where considerable exploration has been undertaken and specific targets identified that warrant further detailed evaluation, usually by drill testing, trenching or some other form of detailed geological sampling. A MRE may or may not have been made but sufficient work will have been undertaken on at least one prospect to provide both a good understanding of the type of mineralisation present and encouragement that further work will elevate one or more of the prospects to the Mineral Resources category.
- **“Pre-Development Projects”** – tenure holdings where Mineral Resources have been identified and their extent estimated (possibly incompletely) but where a decision to proceed with development has not been made. Properties at the early assessment stage, properties for which a decision has been made not to proceed with development, properties on care and maintenance and properties held on retention titles are included in this category if Mineral Resources have been identified, even if no further work is being undertaken.
- **“Development Projects”** – tenure holdings for which a decision has been made to proceed with construction or production or both, but which are not yet commissioned or operating at design levels. Economic viability of Development Projects will be proven by at least a Prefeasibility Study.
- **“Production Projects”** – tenure holdings – particularly mines, wellfields and processing plants - that have been commissioned and are in production.

Each of these different categories will require different valuation methodologies, but regardless of the technique employed, consideration must be given to the perceived “market valuation”.

The Market Value of Exploration Properties and Undeveloped Mineral Resources can be determined by the following general approaches: Cost; Geoscience Factor, Geological Risk, Market; or Income. The Market Value of Development and Production Projects are best assessed using the Market and Income approaches.

Cost

Appraised Value or Exploration Expenditure Method considers the costs and results of historical exploration.

The Appraised Value Method utilises a Multiple of Exploration Expenditure (MEE), which involves the allocation of a premium or discount to past *relevant and effective expenditure* through the use of the Prospectivity Enhancement Multiplier (PEM). This involves a factor which is directly related to the success (or failure) of the exploration completed to date, during the life of the current tenements.

Guidelines for the selection of a PEM factor have been proposed by several authors in the field of mineral asset valuation (Onley, 1994). Table 17 lists the PEM factors and criteria used in this Report.

Table 17: PEM factors

PEM range	Criteria
0.2-0.5	Exploration (past and present) has downgraded the tenement prospectivity, no mineralisation identified
0.5-1.0	Exploration potential has been maintained (rather than enhanced) by past and present activity from regional mapping
1.0-1.3	Exploration has maintained, or slightly enhanced (but not downgraded) the prospectivity
1.3-1.5	Exploration has considerably increased the prospectivity (geological mapping, geochemical or geophysical activities)
1.5-2.0	Scout drilling (rotary air blast (RAB), aircore (AC), reverse circulation percussion (RCP)) has identified interesting intersections of mineralisation
2.0-2.5	Detailed drilling has defined targets with potential economic interest
2.5-3.0	A Mineral Resource has been estimated at Inferred JORC ⁴ category, no concept or scoping study has been completed
3.0-4.0	Indicated Mineral Resources have been estimated that are likely to form the basis of a Prefeasibility Study
4.0-5.0	Indicated and Measured Resources have been estimated and economic parameters are available for assessment

Geoscience Factors

Geoscience Factor method (GFM) seeks to rank and weight geological aspects, including proximity to mines, deposits and the significance of the camp and the commodity sought.

The Geoscience Factor (or Kilburn) method, as described by Kilburn (1990), provides an approach for the technical valuation of the exploration potential of mineral properties, on which there are no defined resources.

Valuation is based upon a calculation in which the geological prospectivity, commodity markets, and mineral property markets are assessed independently. The GFM is essentially a technique to define a Value based upon geological prospectivity. The method appraises a variety of mineral property characteristics:

- Location with respect to any off-property mineral occurrence of value, or favourable geological, geochemical or geophysical anomalies
- Location and nature of any mineralisation, geochemical, geological or geophysical anomaly within the property and the tenor of any mineralisation known to exist on the property being valued
- Number and relative position of anomalies on the property being valued
- Geological models appropriate to the property being valued.

The GFM systematically assesses and grades these four key technical attributes of a tenement to arrive at a series of multiplier factors (Table 21).

The Basic Acquisition Cost (BAC) is an important input to the GFM and it is calculated by summing the application fees, annual rent, work required to facilitate granting (e.g. native title, environmental etc.) and statutory expenditure for a period of 12 months. Each factor is then multiplied serially by the BAC to establish the overall technical value of each mineral property. A fifth factor, the market factor, is then multiplied by the technical value to arrive at the fair market value.

The standard references on the method (Kilburn, 1990; Goulevitch and Eupene, 1994) do not provide much detail on how the market factor should be ascertained. CSA Global takes the approach of using the implied value range from our selected Comparable Transactions to inform the selection of a GFM market factor. Our presumption is that the comparables are capturing the market sentiment, so any other valuation method should not be significantly different (order of magnitude).

This is achieved by finding the market factor that produces an average GFM preferred value per unit area for whole project (i.e. total preferred GFM value divided by the total area) that falls within the range of the

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

comparables implied values per unit area. It is CSA Global's view that this adequately accounts for global market factors on an empirical basis. For example, if the implied value range is \$100/km² to \$2,000/km², then the market factor should give an average GFM preferred value per unit area that falls within that range.

CSA Global generally would select a market factor (rounded to an appropriate number of significant digits) that gives a value closer to the upper end of the range (though this is the valuer's judgement call). This is because the GFM is a tool that addresses the exploration potential of a project and is best suited to informing the upper end of valuation ranges for a project.

Geological Risk Method

In the Geological Risk Valuation method, as described by Lord *et al.* (2001), the value of a project at a given stage of knowledge/development is estimated based on the potential value of the project at a later stage of development, discounted by the probability of the potential value of the later stage being achieved, and considering the estimated cost of progressing the project to the next stage.

The relevant stages of exploration are defined in Table 18.

Table 18: Definition of exploration stages

Stage	Description
Stage A	Ground acquisition, project/target generation
Stage B	Prospect definition (mapping and geochemistry)
Stage C	Drill testing (systematic RC, DD)
Stage D	Resource delineation
Stage E	Feasibility

The expected value (E) of a project at a given stage is then dependent on the target value at the next stage (T), the probability of successfully advancing the project to the next stage (P), and the cost of advancing the project (C). This can be expressed as:

$$E = P * (T - C)$$

This valuation method generates an expected value for each project (or prospect) at each of the main exploration stages or decision points, by working back from a Project's target value. A project's target value can be based on an expected NPV from a reasonably constrained discounted cash flow (DCF) model, or from a reasonable approximation of the value of a defined resource, in which case the initial target value will be the value at the end of Stage D, as opposed to the value at the end of Stage E.

Lord *et al.* (2001) concluded that the probability of successfully proceeding from one exploration phase to the following one was as depicted in Table 19, based on a detailed study of gold exploration programs in the Laverton area of Western Australia.

Table 19: Probability of successfully proceeding from one exploration stage to another

Stages	Probability of advancing
Generative to reconnaissance	0.54
Reconnaissance to systematic drill testing	0.17
Systematic drill testing to Resource delineation	0.58
Resource delineation to Feasibility	0.87
Feasibility to Mine	0.90

Source: Lord *et al.* (2001)

Market

Market Approach Method or Comparable Transactions looks at prior transactions for the property and recent arm's length transactions for comparable properties.

The Comparable Transaction method provides a useful guide where a mineral asset that is comparable in location and commodity has in the recent past been the subject of an "arm's length" transaction, for either cash or shares.

For the market approach resources are not generally subdivided into their constituent JORC Code categories. The total endowment or consolidated in situ resources are what drives the derivation of value. Each transaction implicitly captures the specific permutation of resource categories in a project. There are too many project specific factors at play to allow any more than a consideration of price paid versus total resource base. Therefore, considering individual project resource permutations is neither practicable nor useful for this valuation approach. To that end CSA Global's discussion of the market approach is predicated on the consolidated resource base, to allow application of the method.

In an exploration joint venture or farm-in, an equity interest in a tenement or group of tenements is usually earned in exchange for spending on exploration, rather than a simple cash payment to the tenement holder. The joint venture or farm-in terms, of themselves, do not represent the Value of the tenements concerned. To determine a Value, the expenditure commitments should be discounted for time and the probability that the commitment will be met. Whilst some practitioners invoke complex assessments of the likelihood that commitments will be met, these are difficult to justify at the outset of a joint venture, and it seems more reasonable to assume a 50:50 chance that a joint venture agreement will run its term. Therefore, in analysing joint venture terms, a 50% discount may be applied to future committed exploration, which is then "grossed up" according to the interest to be earned to derive an estimate of the Value of the tenements at the time that the agreement was entered into.

Where a progressively increasing interest is to be earned in stages, it is likely that a commitment to the second or subsequent stages of expenditure will be so heavily contingent upon the results achieved during the earlier phases of exploration that assigning a probability to the subsequent stages proceeding will in most cases be meaningless. A commitment to a minimum level of expenditure before an incoming party can withdraw must reflect that party's perception of minimum value and should not be discounted. Similarly, any up-front cash payments should not be discounted.

The terms of a sale or joint venture agreement should reflect the agreed value of the tenements at the time, irrespective of transactions or historical exploration expenditure prior to that date. Hence the current Value of a tenement or tenements will be the Value implied from the terms of the most recent transaction involving it/them, plus any change in Value as a result of subsequent exploration. Where the tenements comprise applications over previously open ground, little to no exploration work has been completed and they are not subject to any dealings, it is thought reasonable to assume that they have minimal, if any Value, except perhaps, the cost to apply for, and therefore secure a prior right to the ground, unless of course there is competition for the ground and it was keenly sought after. Such tenements are unlikely to have any Value until some exploration has been completed, or a deal has been struck to sell or joint venture them, implying that a market for them exists.

High quality Mineral Assets are likely to trade at a premium over the general market. On the other hand, exploration tenements that have no defined attributes apart from interesting geology or a "good address" may well trade at a discount to the general market. Market Values for exploration tenements may also be impacted by the size of the land holding, with a large, consolidated holding in an area with good exploration potential attracting a premium due to its appeal to large companies.

Yardstick

The Rule-of-Thumb (Yardstick) Method is relevant to exploration properties where some data on tonnage and grade exist and may be valued by methods that employ the concept of an arbitrarily ascribed current in-situ net value to any Ore Reserves (or Mineral Resources) outlined within the tenement (Lawrence, 2001 and 2012).

Rules-of-Thumb (Yardstick) methods are commonly used where a Mineral Resource remains in the Inferred category and available technical/economic information is limited. This approach ascribes a heavily discounted in-situ value to the Resources, based upon a subjective estimate of the future profit or net value (say per tonne of ore) to derive a rule-of-thumb.

This Yardstick multiplier factor applied to the Resources delineated (depending upon category) varies depending on the commodity. Typically, a range from 0.4% to 3% is used for base metals and PGM, whereas for gold and diamonds a range of 2% to 4.5% is used. The method estimates the in-situ gross metal content value of the mineralisation delineated (using the spot metal price and appropriate metal equivalents for polymetallic mineralisation as at the valuation date).

The chosen percentage is based upon the valuer's risk assessment of the assigned JORC Code's Mineral Resource category, the commodity's likely extraction and treatment costs, availability/proximity of transport and other infrastructure (particularly a suitable processing facility), physiography and maturity of the mineral field, as well as the depth of the potential mining operation.

This method is best used as a non-corroborative check on the order of magnitude of values derived using other valuation methods that are likely to better reflect project-specific criteria.

Income

The DCF/NPV method, as described by Lawrence (2000a), is particularly suitable for valuing mines (whether developing, operating, restarting or expanding) and pre-development projects (including advanced exploration prospects in certain cases), as it recognises the time value of money. Value can be derived with a reasonable degree of confidence by forecasting the cash flows that would accrue from mining the deposit, discounting to the present day and determining an NPV.

Key inputs to the financial model are the mineral resource or reserve base; suitably detailed capital and operating costs, including mining, processing and labour costs; commodity price and foreign exchange forecasts; royalty and tax rates; and an appropriate discount rate.

The Income Approach is not appropriate for properties without Mineral Resources. It should be employed only where sufficient reliable data are available to provide realistic inputs to a financial model, preferably based on studies at or exceeding a prefeasibility level.

Valuation Approaches by Asset Stage

Regardless of the technical application of various valuation methods and guidelines, the valuer should strive to adequately reflect the carefully considered risks and potentials of the various projects in the valuation ranges and the preferred values, with the overriding objective of determining the "fair market value".

Table 20 below shows the valuation approaches that are generally considered appropriate to apply to each type of mineral property.

Table 20: Valuation approaches for different types of mineral properties (VALMIN, 2015)

Valuation approach	Exploration properties	Mineral Resource properties	Development properties	Production properties
Income	No	In some cases	Yes	Yes
Market	Yes	Yes	Yes	Yes
Cost	Yes	In some cases	No	No

Table 21: Geoscientific Factor rankings

Rating	Address/Off-property factor	On-property factor	Anomaly factor	Geological factor
0.5	Very little chance of mineralisation; Concept unsuitable to the environment	Very little chance of mineralisation; Concept unsuitable to the environment	Extensive previous exploration with poor results	Generally unfavourable lithology; No alteration of interest
1	Exploration model support; Indications of prospectivity; Concept validated	Exploration model support; Indications of prospectivity; Concept validated	Extensive previous exploration with encouraging results; Regional targets	Deep cover; Generally favourable lithology/alteration (70%)
1.5	Reconnaissance (RAB/AC) drilling with some scattered favourable results; Minor workings	Exploratory sampling with encouragement	Several early stage targets outlined from geochemistry and geophysics	Shallow cover; Generally favourable lithology/alteration 50-60%
2	Several old workings; Significant RCP drilling leading to advanced project	Several old workings; Reconnaissance drilling or RCP drilling with encouraging intersections	Several well-defined targets supported by recon drilling data	Exposed favourable; Lithology/alteration
2.5	Abundant workings; Grid drilling with encouraging results on adjacent sections	Abundant workings; Core drilling after RCP with encouragement	Several well-defined targets with encouraging drilling results	Strongly favourable lithology, alteration
3	Mineral Resource areas defined	Advanced Resource definition drilling (early stages)	Several significant sub-economic targets; No indication of 'size'	Generally favourable lithology with structures along strike of a major mine; Very prospective geology
3.5	Abundant workings/mines with significant historical production; Adjacent to known mineralisation at PFS stage	Abundant workings/mines with significant historical production; Mineral Resource areas defined	Several significant sub-economic targets; Potential for significant 'size'; Early stage drilling	
4	Along strike or adjacent to Resources at DFS stage	Adjacent to known mineralisation at PFS stage	Marginally economic targets of significant 'size' advanced drilling	
4.5	Adjacent to development stage project	Along strike or adjacent to Resources at DFS stage	Marginal economic targets of significant 'size' with well drilled Inferred Resources	
5	Along strike from operating major mine(s)	Adjacent to development stage project	Several significant ore grade co-relatable intersections	

Valuation Bibliography

- AusIMM (1998): "VALMIN 94 – Mineral Valuation Methodologies". Conference Proceedings.
- AusIMM (2012): "VALMIN Seminar Series 2011-12". Conference Proceedings, 161pp
- CIMVAL (2003). Standards and Guidelines for Valuation of Mineral Properties.
- Gouleivitch, J and Eupene, G. (1994): "Geoscience Rating for Valuation of Exploration Properties - Applicability of the Kilburn Method in Australia and Examples of its Use in the NT". Mineral Valuation Methodologies Conference, Sydney 27-28 October 1994. AusIMM. pp 175-189
- Gregg, L. T. and Pickering, S.M. Jr (2007). Methods for Valuing Previous Exploration Programs During Consideration of Prospective Mineral Ventures in 42nd Industrial Minerals Forum in Asheville, NC.
- JORC, 2012. *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)* [online]. Available from: <http://www.jorc.org> (The Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia).
- Kilburn, L.C. (1990) "Valuation of Mineral Properties which do not contain Exploitable Reserves" CIM Bulletin, August 1990.
- Lawrence, R.D. (2000). Valuation of Mineral Properties Without Mineral Resources: A Review of Market-Based Approaches in Special Session on Valuation of Mineral Properties, Mining Millennium 2000, Toronto, Canada.
- Lawrence, M.J. (2000a). "DCF/NPV Modelling: Valuation Practice or Financial Engineering?". Preprint of a paper presented to SME Annual Meeting Valuation Session, Salt Lake City, 28 February to 4 March, 15 p.
- Lawrence, M.J. (2001). An Outline of Market-based Approaches for Mineral Asset Valuation Best Practice. Proceedings VAMIN 2001 – Mineral Asset Valuation Issues for the Next Millennium. Pp115-137.AusIMM.
- Lawrence, M.J. (2011). Considerations in Valuing Inferred Resources. VALMIN Seminar Series 2012. AusIMM. P93–102.
- Lord, D., Etheridge, M., Wilson, M., Hall, G., and Uttley, P., 2001. Measuring Exploration Success: An alternate to the discovery-cost-per-ounce method of quantifying exploration effectiveness, Society of Economic Geologist Newsletter, 45
- Onley, P.G. (2004). Multiples of Exploration Expenditure as a Basis for Mineral Property Valuation. In Mineral Valuation Methodologies Conference. AusIMM. pp191–197.
- Thompson, I.S. (2000) A critique of Valuation Methods for Exploration Properties and Undeveloped Mineral Resources in Special Session on Valuation of Mineral Properties, Mining Millennium 2000, Toronto, Canada.
- VALMIN, 2015. *Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code)* [online]. Available from <http://www.valmin.org> (The VALMIN Committee of the Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists).

Appendix 2: Comparative Transactions

Table 22: Summary of Comparative Transactions

Transaction	Project	Country	Date	Buyer	Seller	Synopsis	Comment
Denham acquisition of Beravina	Beravina	Madagascar	May-19	Denham Mining Fund LP	Diamond Field Resources Inc.	Denham could acquire a 100% interest in the Beravina Project from Diamond Fields for: an immediate payment of US\$250,000, funding the 2019 Work Program for US\$500,000, and an option exercise payment of US\$2 million. In addition, a 9% sales royalty on all future mineral sales.	Hard rock zircon resource
Diamond Field acquisition of Beravina	Beravina	Madagascar	Aug-16	Diamond Field Resources Inc.	Pala Investments Limited; Austral Resources Limited	Diamond Fields acquired a 100% interest in Beravina from Pala and Austral by: paying Pala US\$300,000 in cash and issuing 3,265,650 common shares at a deemed price of C\$0.02 per share, and paying Austral US\$60,420 cash.	Hard rock zircon resource. Non-current resource estimate.
Base acquisition of Toliara	Toliara	Madagascar	Dec-17	Base Resources Limited	World Titane Holdings Ltd	Base acquired an 85% interest in Toliara for US\$75 million, and could acquire the remaining 15% for a further US\$17 million on achievement of key milestones as the project advances to mine development.	Primary heavy mineral is Ilmenite
Savannah consolidation of Jangamo	Jangamo	Mozambique	Jun-15	Savannah Resources plc	Matilda Minerals Limitada	In June 2015, Savannah announced that it would acquire the remaining 20% in the Jangamo project for A\$100,000 in order to participate in a proposed joint venture with Rio Tinto.	Primary heavy mineral is Ilmenite
Windimurra acquisition of Mannar	Mannar	Sri Lanka	Mar-14	Windimurra Vanadium Limited	Cuprum Holdings Limited	In April 2014, Windimurra announced an agreement whereby it could acquire the Mannar project for US\$550,000 in cash and 2 million shares. Further shares would be issued if specific milestones were met.	Primary heavy mineral is Ilmenite
Iluka acquisition of Sierra Rutile	Gangama, Lanti, Sembehun	Sierra Leone	Aug-16	Iluka Resources Limited	Sierra Rutile Limited	In August 2016, Iluka announced a GBP215 million cash offer to acquire Sierra Rutile.	Operating mine with large resource base. Primary heavy mineral is rutile
Eramet acquisition of Mineral Deposits	Grand Cote	Senegal	Apr-18	Eramet S.A.	Mineral Deposits Limited	In April 2018, ERAMET announced a bid to acquire Mineral Deposits, which held the 50% interest in Grand Cote that Eramet did not already own. The offer valued Mineral Deposits at A\$291 million.	Operating mine with large resource base. Deal includes processing facility in Norway
Doral acquisition of Keysbrook	Keysbrook	Australia	Jun-19	Doral Mineral Sands Pty Ltd	MZI Resources Ltd	In June 2019, the voluntary administrators of MZI announced the sale of Keysbrook to Doral for approximately A\$32 million plus future landowner debt obligations.	Operating mine, bought out of administration

Table 23: Comparative Transactions analysed

Transaction	Project	Country	Date	Asset Description	Dominant HM	US\$/t VHM	Comment
Denham acquisition of Beravina	Beravina	Madagascar	May-19	The Beravina deposit is a hard-rock (pegmatite) zircon deposit in Madagascar, with an Inferred Resource of 1.5 Mt at 22.7% zircon. The project covers an area of 625 ha.	Zircon	8.08	Hard rock zircon resource
Diamond Field acquisition of Beravina	Beravina	Madagascar	Aug-16	The Beravina deposit is a hard-rock (pegmatite) zircon deposit in Madagascar, and had a non-current (historic) indicated resource of 1.8 Mt at 29.5% zircon.	Zircon	0.77	Hard rock zircon resource. Non-current resource estimate.
Base acquisition of Toliara	Toliara	Madagascar	Dec-17	The Toliara Project is underpinned by the Ranobe deposit, which had a total resource of 857 Mt at 6.2% heavy mineral, with the primary heavy mineral being ilmenite.	Ilmenite	1.66	Primary heavy mineral is Ilmenite
Savannah consolidation of Jangamo	Jangamo	Mozambique	Jun-15	The Jangamo deposit had an Inferred Resource of 65 Mt at 4.2% THM. The HM assemblage was dominated by Ilmenite.	Ilmenite	0.14	Primary heavy mineral is Ilmenite
Windimurra acquisition of Mannar	Mannar	Sri Lanka	Mar-14	Windimurra declared an Inferred Resource of 10.3Mt at 5.5% THM within a year of acquiring the tenements.	Ilmenite	4.25	Primary heavy mineral is Ilmenite
Iluka acquisition of Sierra Rutile	Gangama, Lanti, Sembehun	Sierra Leone	Aug-16	Operating mine, with both dry operations and dredging operations. Total resource of 867Mt at roughly 1.1% HMS.	Rutile	29.31	Operating mine with large resource base. Primary heavy mineral is rutile
Eramet acquisition of Mineral Deposits	Grand Cote	Senegal	Apr-18	Operating mine in Senegal, and ilmenite processing facility in Norway. Total resource of 1,847Mt at roughly 1.4% HMS.	Zircon	20.50	Operating mine with large resource base. Deal includes processing facility in Norway
Doral acquisition of Keysbrook	Keysbrook	Australia	Jun-19	The operating mine was sold on a "business as usual" basis. It has total resources of 165.9Mt at 1.9% HMS.	Leucoxene, Zircon	7.02	Operating mine, bought out of administration

HM – Heavy Mineral

HMS = Heavy Mineral Sands; in the analysis this is referring to the total resource size

VHM – Valuable Heavy Minerals, in the analysis this refers to tonnage of contained heavy minerals

For personal use only



Australia • Canada • Indonesia • Russia
Singapore • South Africa • United Kingdom

csaglobal.com





TECHNICAL ASSESSMENT REPORT

MANDIRI PROJECT CENTRAL KALIMANTAN REPUBLIC OF INDONESIA

Prepared for

South Pacific Resources Limited

Report Number WA19/05

AUTHOR: **J. M Chisholm**
BSc (Hons), PhD, FAusIMM (CP).
Yulindra Christiawan
BEng (Geol), MAusIMM, MAIG

DATE: **July 2019**

TABLE OF CONTENTS

1	Executive Summary	5
2	Introduction	10
2.1	Compliance with the JORC and VALMIN Codes and ASIC Regulatory Guides	10
2.2	Statement of Independence	10
2.3	Competent Persons Declaration and Qualifications	10
2.4	Principal Sources of Information and Reliance on Experts	10
2.5	Site Inspection	11
2.6	Mineral Assets	11
2.7	Location and Access	11
2.8	Coordinate System	12
2.9	Tenure and Agreements	12
2.9.1	Tenure	12
2.9.2	Agreements	13
2.10	Environment, social and culture factors	13
2.11	Climate	14
2.12	Regional Mineralisation	14
2.13	Regional Geology	16
3	Mandiri Project	17
3.1	Introduction	17
3.2	Exploration History	17
3.3	Geology	18
3.4	Database	19
3.5	Mineralisation	19
3.6	Geometry of the mineralisation	20
3.7	Drilling Methods	20
3.7.1	Recovery	20
3.7.2	Sampling	21
3.8	Survey control	21
3.9	Density	22
3.10	Analyses	22
3.11	QA/QC	25
3.11.1	Twinned auger holes	25
3.11.2	Standards	25
3.11.3	Duplicates	26
4	Mineral Resource Estimation Methodology	28
4.1	Estimate Procedure	28
4.2	Upper Cuts	28

4.3	Previous Mineral Resource Estimates	28
4.4	Ore Reserves	28
4.5	Mineral Resource Estimation Parameters	29
4.5.1	Input data	29
4.5.2	Search dimensions	31
4.5.3	Block Dimensions	31
4.5.4	Ore Block Models	32
5	Mineral Resource Statement	35
5.1	Resource Classification	35
5.2	Resource Tables	35
5.3	Resource Validation	37
5.3.1	Input-Output Comparison	37
5.4	Previous Estimate Comparison	37
5.5	Exploration potential	37
5.5.1	Heavy Mineral Sands	37
5.5.2	Gold	38
6	Mineral processing	39
7	Proposed Exploration and Budget	41
7.1	Mandiri tenement.	41
7.2	Regional exploration	41
7.3	Processing plant expansion	41
7.4	Proposed budget	42
7.5	Merit	42
8	Declaration	43
9	References	44
10	Glossary of Technical Terms and Abbreviations	45
11	JORC Table 1 – For Resource Estimation	52
11.1	Section 1 Sampling Techniques and Data	52
11.2	Section 2 Reporting of Exploration Results	54
11.3	Section 3 Estimation and Reporting of Mineral Resources	56

Figures

Figure 1-1	Monthly HMC production from the Mandiri tenement	5
Figure 2-1	Mandiri Project location plan.....	12
Figure 2-2	PTIR Mandiri tenement.....	12
Figure 2-3	Annual temperature chart for Palankaraya	14
Figure 2-4	Annual rainfall and days of rain chart for Palankaraya.....	14
Figure 2-5	Annual humidity chart for Palankaraya	14
Figure 2-6	Annual wind speed chart for Palankaraya	14
Figure 2-7	Simplified geological plan of Kalimantan Island	16
Figure 3-1	Area of previous artisanal workings at Mandiri.....	17
Figure 3-2	Artisanal miners panning for gold within the Mandiri tenement in January 2019.....	18

Figure 3-3 Gold tail in the pan from the Mandiri tenement	18
Figure 3-4 Geological map of the Mandiri tenement area	19
Figure 3-5 Mechanical auger drill used during phase 2	
Figure 3-6 Cone and quartering of samples	
Figure 3-7 Core from auger hole DA-229 laid out for logging.....	21
Figure 3-8 Histograms of the distribution of HM%, Slimes%, Oversize% & alluvium thickness (m)...	23
Figure 3-9 HM% Plot of field analyses (y-axis) relative to laboratory XRF results	26
Figure 3-10 Fe% Plot of field analyses (y-axis) relative to laboratory XRF results	27
Figure 3-11 Ti% Plot of field analyses (y-axis) relative to laboratory XRF results	27
Figure 3-12 HM% Plot of field analyses (y-axis) relative to laboratory XRF results	27
Figure 4-1 Monthly HMC production from the Mandiri tenement during 2018	28
Figure 4-2 drill hole location plan	30
Figure 4-3 Mandiri deposit - Locations of OBM's relative to auger holes	32
Figure 4-4 Mandiri deposit – Alluvium thickness (m) relative to auger holes	33
Figure 4-5 Mandiri deposit – Slimes % relative to auger holes.....	33
Figure 4-6 Mandiri deposit – Oversize % relative to auger holes	34
Figure 6-1 Shaking table at the PTIM plant.....	39
Figure 6-2 Electrostatic and electromagnetic separators installed at the PTIM plant	39
Figure 6-3 Schematic processing scheme at the PTIM plant	40

Tables

Table 1-1 Mineralogical composition of a 551 t dry weight sample from the Mandiri Tenement processed through the PTIM plant.....	6
Table 1-2 Mineral assemblage for the Mandiri HMS deposit	6
Table 1-3 Mineral Resources above 2% HM lower block cut-off grade (unrounded)	7
Table 1-4 Mineral assemblage and contained tonnes of the components (unrounded)	8
Table 2-1 Mandiri tenement coordinates	12
Table 3-1 Basic statistics for mineralised intervals for the laboratory analyses.....	22
Table 3-2 Basic statistics for the HM, slime, oversize and mineralised intervals.....	22
Table 3-3 Analysis of HM composite sample concentrate from auger drilling at Mandiri	24
Table 3-4 Results of twinned auger drilling.....	25
Table 3-5 Results of testing certified reference material.....	25
Table 3-6 Results of routine analysis of standard OREAS-461 for Zr	26
Table 3-7 Results of Olympus XRF compared to Bandung Laboratory – Composite HM concentrate	26
Table 4-1 Mineralogical composition of a 551 t dry weight sample of high grade zircon concentrate from the Mandiri Tenement.....	29
Table 5-1 Mineral Resources above 2% HM lower block cut-off grade (unrounded)	35
Table 5-2 Mineral assemblage and contained tonnes of the components (unrounded)	35
Table 5-3 Inferred Resources by lower block cut-off grade (unrounded).....	37
Table 5-4 Comparison of Input and Output Grades.....	37
Table 7-1 Summary of Exploration Expenditure	42

1 EXECUTIVE SUMMARY

Introduction

South Pacific Resources Limited (SPB, or Company) requested that Continental Resource Management Pty Ltd (CRM) provide an Independent Technical Assessment Report (ITAR or Report) on the Mandiri Heavy Mineral Sand Project currently held by PT. Investasi Mandiri (PTIM). The Report is to be included in a Prospectus, to raise up to A\$14 million, being prepared by SPB.

PTIM is the holder of a 2,032 ha Heavy Mineral Sand (HMS) mining tenement, located close to Kuala Kurun city in the Gunung Mas Regency. The tenement is currently held under mining permit Izin Usaha Pertambangan – Operasi Produksi (IUP-OP) No. 16/DPE/IX/2010 issued by Bupati Gunung Mas on 2nd September 2010. PTIM has exclusive rights to perform exploration and mining works in the tenement area.

In accordance with Indonesian minerals legislation it is a requirement to construct a processing plant in order to obtain an export permit for minerals. Consequently, PTIM have a HMS processing plant located 23 km south of the Mandiri tenement that forms part of the Mineral Asset. The plant is currently in operation producing 500 t per month of high-grade zircon and rutile/ilmenite product from HM concentrate purchased from artisanal miners including those operating within the Mandiri tenement. In 2018 the plant produced 7,269 t of product derived from the Mandiri tenement.

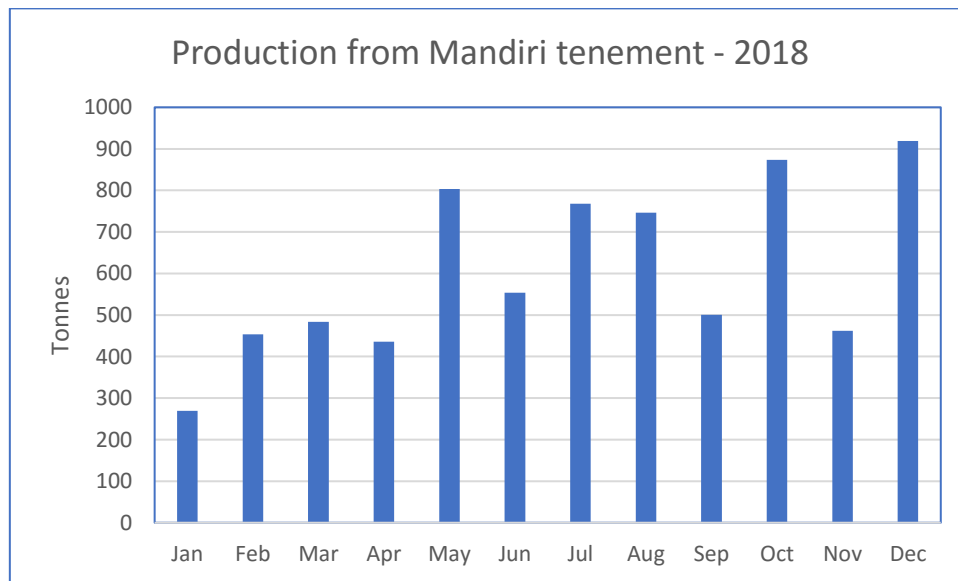


Figure 1-1 Monthly HMC production from the Mandiri tenement

Mineral assemblage

The mineral assemblage of the product from the Mandiri project is well established and confirmed by the certified laboratory analyses required by legislation for export product (Table 1-1).

The mineralogical content of a 551 t batch of dry zircon concentrate processed through the PTIM processing plant provides an indication as to the mineral assemblage of the HMS. This table does not provide the relative proportions of the minerals present in the Mandiri HMS as it is for the zircon concentrate after separation of the titanium minerals.

Table 1-1 Mineralogical composition of a 551 t dry weight sample from the Mandiri Tenement processed through the PTIM plant

Mineral product	Weight	Relative %
Zircon	358 t	64.97 %
Mixed ilmenite	104 t	18.87 %
Rutile	13 t	2.36 %
Monazite mix	4 t	0.73 %
Trash	72 t	13.07 %
Gold	1041 g	1.89 g/t
Total	551 t	100.00 %

Note: The feedstock sample was obtained via contracted artisanal miners who are only engaged for the purposes of extracting Zircon.

The relative percentage of the minerals comprising the mineral assemblage for the Mandiri HMS deposit (Table 1-2) is based on actual production data over a 12 months period from the PTIM processing plant. The plant feed was supplied to the processing plant by contract miners in the form of concentrate from small scale mining operations from within the Mandiri Concession area. The processing plant separates the various mineral components into high-grade products which can be easily visually identified. For example, the zircon product is very high-grade zircon whereas the mixed ilmenite produce will contain a variety of ilmenite forms. The effectiveness of the plant in the separation of the constituent minerals into pure and relatively pure products is supported by chemical analyses is consistent with the results of the mineralogical composition of the 551 t sample referred to in Table 1-1. The chemical analyses are carried out by independent laboratories by XRF analysis in accordance with the mineral export licence regulations. All data used in the above analysis was supplied by PTIM during the actual site visit in January 2019.

Table 1-2 Mineral assemblage for the Mandiri HMS deposit

Component	Zircon	Ilmenite	Rutile	Other	Waste + H ₂ O	Total
Relative %	68%	9.5%	8.5%	1%	13%	100%

The Mandiri tenement, contains heavy mineral sand mineralisation, hosted in Holocene age alluvium the product of an ancient Kahayan river channel and flood plain. The sediment is comprised mainly of unconsolidated sands and contains some 25% clay and silt. The area is geologically relatively simple with an alluvium layer generally of 2 to 6 m in thickness with some areas having up to 11 m in thickness. The alluvium bed is overlain by a Miocene age coal-bearing sequence called the Werukin Formation.

Sampling

A programme of auger drilling and surface geological mapping was conducted in November to December 2018 with a second phase of auger drilling completed during January 2019 and a third phase completed during February 2019.

The initial auger drilling was undertaken at 200 m spacing and covered an area of 470 ha, or 12.5% of the total concession area of 2,032 ha. A total of 18 hand powered auger holes were completed and all holes intersected the target alluvium bed. Based on the surface geological mapping it is estimated that the tenement contains about 1,100 ha of mineralised alluvium bed. About 60% of the mineralised area has been disturbed by artisanal mining activity but it is noted that this activity was only over shallow depths and the recovery was very poor.

A second and third phase of auger drilling used a motorised auger to get samples at greater depth and many of the holes collapsed below the water table similar to the phase 1 auger drilling and the holes were terminated. The holes located further to the west were deeper and contained thicker intersections of alluvium. The spacing of the holes were increased to 400 m by 800 m to get samples over the entire area of the HMS layer.

The auger samples were collected in 1 m intervals and placed in core trays prior to being placed in plastic bags for storage. Sub-samples were sub-sampled using cone and quartering. A composite sample was prepared for the interval and analysed by the Uptd Laboratorium Energi Dan Sumber Daya Mineral in Banjarbaru. A suite of 14 elements were analysed plus loss on ignition (LOI). The elements analysed included; ZrO_2 , TiO_2 & Fe_3O_4 . Based on mineral formulae and the ratio of rutile to ilmenite present in the mineral assemblage, zircon, rutile and ilmenite contents were estimated.

Composite samples of the alluvium were submitted to the above laboratory for determination of the HM, slimes (-45 micron) and oversize (+1 mm) content.

Mineral Resources

The resource estimate employed Inverse Distance modelling method to produce an ore block model (OBM) of the mineralisation within the deposit. A single, simple OBM was produced as a single layer. The use of the composited single interval for the mineralisation meant that a wireframe was unnecessary in order to constrain the volume and grade of the deposit.

The X-Y block size was 100 m by 100 m with the Z axis being the thickness of the alluvium. A spherical search distance of 550 m was used with an inverse distance cubed interpolation for the grade, density and mineralised interval.

An Inferred Mineral Resource was estimated as the exploration data available and the QA/QC protocol was not sufficient for a higher resource category.

Table 1-3 Mineral Resources above 2% HM lower block cut-off grade (unrounded)

Area	Category	Tonnage (Mt)	HM (%)	Slimes (%)	Oversize (%)
Mandiri	Inferred	126.3	7.43	8.98	16.14

The Inferred Mineral Resources for the Mandiri HMS deposit are defined as 126 Mt containing 7%, HM 9% slimes and 16% oversize at a lower cut-off grade of 2%¹.

¹ The Statement of Resources are rounded in accordance with the JORC Code and consequently unrounded totals in the associated table may not agree.

The mineral assemblage of the product from the Mandiri project is well established based on production records from the PTIM processing plant and confirmed² by the certified laboratory analyses required by legislation for export product.

Table 1-4 Mineral assemblage and contained tonnes of the components (unrounded)

Component	Zircon	Ilmenite	Rutile	Other	Waste +H ₂ O	Total
Relative %	68%	9.5%	8.5%	1%	13%	100%
Contained mineral	6.00 Mt	0.84 Mt	0.75 Mt	0.09 Mt	1.15 mt	8.82 Mt

Based on the data available, the tonnage of contained zircon, ilmenite and rutile which together comprise the VHM is 7.59 Mt.

Potential for additional resources

As a result of many of the auger holes being unable to penetrate below the water table there remains considerable potential for mineralisation to be present below the water table. The currently defined Inferred Mineral Resources are only for the alluvial zone above the water table. The deepest auger hole that intersected bedrock was 11 m in depth which is considerably more than the 3.68 m average thickness of the alluvial material within the Inferred Resource. It is most likely that additional mineralisation will be located below the currently defined resource and these additional resources are referred to as Exploration Targets. Testing this zone will require drilling using an air-core mechanised drilling rig.

In addition to the Exploration Target below the water table there is the potential for additional HMS mineralisation to be located to the northwest of the current resources below the younger Werukin Formation.

In the case of the Mandiri tenement the Exploration Target for HMS within the Mandiri tenement is in the order of 25 – 30 Mt of sand containing 4 - 7 % heavy minerals. Mineralisation expressed as Exploration Targets are in addition to Mineral Resources. It should be noted that the potential quantity and grade is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource in relation to this Exploration Target and it is uncertain if further exploration will result in the estimation of a Mineral Resource in relation to this Exploration Target.

An Exploration Target which is an estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade, relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource. In the case of the Mandiri tenement the Exploration Target has been conservatively estimated as potential HMS mineralisation extending a further 25% in depth below the water table beneath the Inferred Mineral Resources at a grade not exceeding the grade of the Inferred Mineral Resources.

In addition to the HMS the tenement is known to contain alluvial gold and platinum which is currently being exploited by artisanal miners. It is not known how much gold the artisanal miners are producing but significant quantities of gold are being recovered by the PTIM processing facility which purchases heavy mineral concentrate from the artisanal miners. In the course of panning

² Based on the known chemical composition of each mineral present in the assemblage.

For personal use only

samples during the auger drilling the site geologists reported small gold grains in auger hole DA-206R.

Laboratory analysis of concentrate from the processing plant reports gold grades of 5 – 37 g/t Au in concentrate but this is from concentrate purchased from artisanal miners who have already worked the material for gold. Platinum has also been reported in laboratory analysis of rutile concentrate at levels of 215 and 101 g/t.

While there is insufficient analytical data to estimate Mineral Resources for gold the Exploration Target for gold mineralisation is estimated to be 30 -50 Mt of sand at a grade – 1 – 5 g/t Au.

2 INTRODUCTION

South Pacific Resources Limited (SPB, or Company) commissioned Continental Resource Management Pty Ltd (CRM) to prepare an Independent Technical Assessment Report (ITAR) on the Mandiri HMS Project. The Report is to be included in a Prospectus, to raise up to A\$14 million.

The Mandiri Project comprises a single tenement and an established mineral processing plant.

2.1 Compliance with the JORC and VALMIN Codes and ASIC Regulatory Guides

This ITAR has been prepared in accordance with the 2012 JORC Code and the 2015 VALMIN Code. Both industry codes are binding for all members of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. These codes are also requirements under Australian Securities and Investment Commission (ASIC) rules and guidelines and the listing rules of the Australian Securities Exchange (ASX).

2.2 Statement of Independence

No member or employee of CRM is, or is intended to be, a director, officer or other direct employee of the Company. No member or employee of CRM has, or has had, any share-holding, or the right (whether enforceable or not) to subscribe for securities, or the right (whether legally enforceable or not) to nominate persons to subscribe for securities in the Company. There is no agreement or understanding between CRM and the Company as to CRM performing further work for the Company. Fees for the preparation of this report are being charged at a commercial rate, the payment of which are not contingent upon the conclusions of the report. They total about \$15,000.

2.3 Competent Persons Declaration and Qualifications

The information in relation to geology, exploration results and mineral resources is based on, and fairly represents, information and supporting documentation that has been compiled and reported by Dr John Chisholm, BSc Hons, PhD (Geol.), a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (CP). Dr Chisholm is a Principal Geologist of Continental Resource Management Pty Ltd, a geological consultancy, which was engaged by SPB to compile the geology, exploration history, Mineral Resources and potential of the Mandiri Project. Dr Chisholm has sufficient experience, which is relevant to the style of mineralisation, geology and type of deposit under consideration and to the activity being undertaken to qualify as a competent person under the 2012 JORC Code. Dr Chisholm consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Additional information relating to the geological setting of the deposit was contributed by Yulindra Christiawan. As a member of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and a Competent Person Indonesia, Resource Estimator for Coal and Nickel-laterite, he has sufficient experience relevant to the style of mineral deposit under consideration. Mr Christiawan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

2.4 Principal Sources of Information and Reliance on Experts

The statements and opinions contained in this report are given in good faith. This report is based on information provided by SPB, along with technical reports prepared by consultants, and other relevant published and unpublished information. SPB provided CRM with details of the tenement details, relevant technical reports, maps, GIS data and drilling database. CRM has endeavoured, by

making all reasonable enquires, to confirm the authenticity, accuracy, and completeness of the data and information. CRM has no reason to doubt the authenticity or substance of the information provided.

2.5 Site Inspection

Two site visits were conducted by Dr Chisholm on the 24th September 2018 and 22nd January 2019.

2.6 Mineral Assets

The Mineral Asset that is included in this report is the Mandiri Project that comprises one tenement and associated mineral processing plant, situated in the Gunung Mas Regency of the Central Kalimantan, Indonesia. Under Indonesian Mineral Legislation it is a requirement that a production facility be established as part of the licence approval procedure for the export on minerals from the tenement. A mineral processing facility that forms part of the Mandiri tenement is located 23.3 km to the south of the tenement.

The Mandiri Project contains Inferred Mineral Resources that were estimated in accordance with the 2012 JORC Code. There are currently no defined Ore Reserves.

2.7 Location and Access

The Mandiri deposit is located in the Kuala Kurun administration area, within the Gunung Mas Regency in Central Kalimantan and is approximately 170 km north of the provincial capital city Palangkaraya.

The tenement can be accessed by commercial flights from Jakarta to Palangkaraya in 1 hours and 20 minutes. From the airport, the drive to the tenement area takes about 4½ hours.

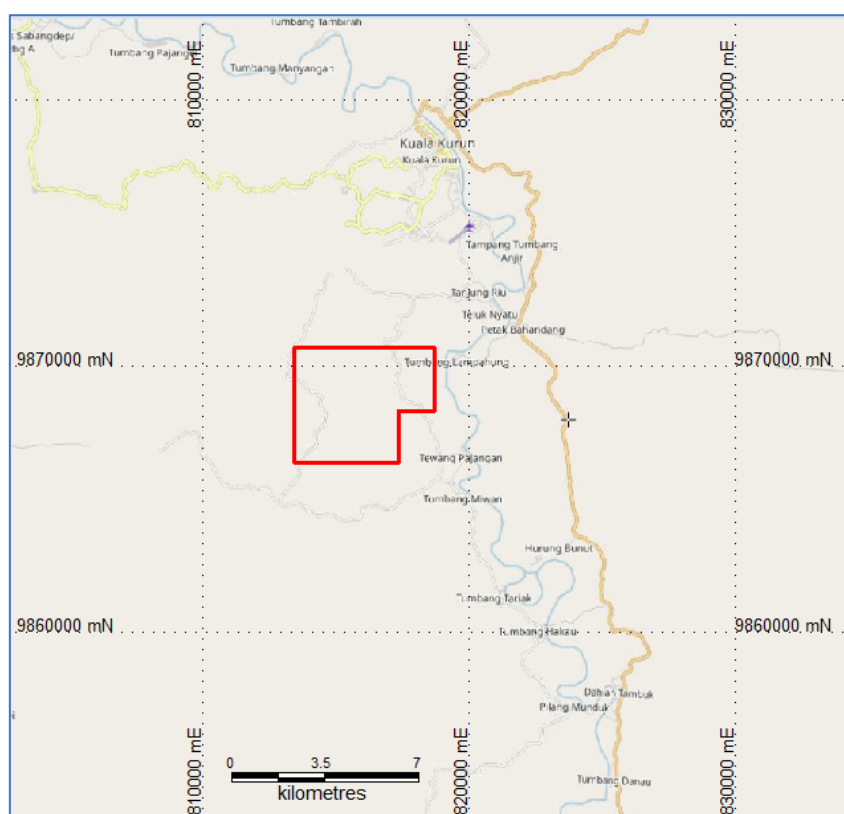


Figure 2-1 Mandiri Project location plan

2.8 Coordinate System

The coordinate system used is the Universal Transverse Mercator (UTM) Zone 49 (49M) south coordinate system under WGS 1984 spheroid, the local bench mark networking is measured or linked to the National Geospatial Informatics Biro (BIG) reference point, situated on Kuala Kurun district office. The BM survey complied with Indonesia National Standard (SNI) 19-6724-2002.

2.9 Tenure and Agreements

CRM has not verified the ownership status or good standing of the tenement and has relied upon documentation supplied by PTIM, the tenement holder, and SPB.

2.9.1 Tenure

PTIM was granted mining permit Izin Usaha Pertambangan-Operasi Produksi (IUP-OP) for a total area of 2,032 ha, by Bupati Gunung Mas, No. 16/DPE/IX/2010, on 2nd September 2010.

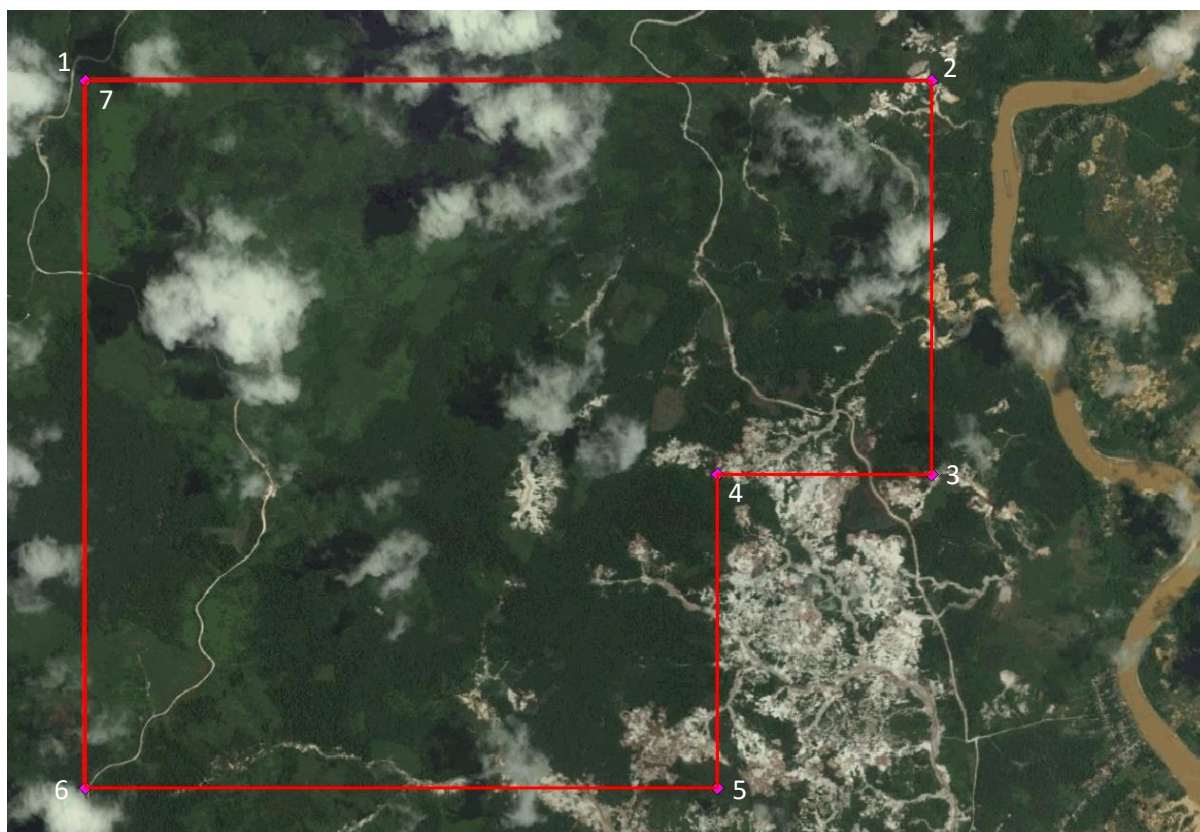


Figure 2-2 PTIR Mandiri tenement

The tenement is defined by the geographic coordinates is presented by Table 2-1 below.

Table 2-1 Mandiri tenement coordinates

Point Number	Longitude	Latitude
1	113° 48' 59"	01° 10' 5"
2	113° 51' 49"	01° 10' 5"
3	113° 51' 49"	01° 11' 24"
4	113° 51' 6"	01° 11' 24"
5	113° 51' 6"	01° 12' 26.90"

6	113' 48' 59"	01' 12' 26.90"
7	113' 48' 59"	01' 10' 5"

The conditions of grant including Indonesian taxes and other financial obligation of PTIM are set out in the IUP. A summary of some of the key provision is as follows;

- Dead rent is payable to Government of Indonesia at rate of US\$4 per hectare per annum,
- Royalty on thermal Heavy Mineral Sand produced is 3% by April 2015,
- Corporate tax of 25 % is set by Government of Indonesia,
- A withholding tax is payable on interest and dividends. This is set at 5% to 30% for non-resident foundation shareholder, but will increase to 20% for non-resident shareholders who are not foundation shareholders,
- PTIM shall collect, remit and report VAT on the delivery of taxable goods and or service at a rate of 10%,
- Land and building taxes payable to the local government are applicable, at rate of US\$0.53 per hectare,
- Environmental obligations including reclamation bonding and plans have been approved by local government as part of the mine approval process in the term of reclamation bank guarantee,

The development of HMS occurrences in Indonesia consists of obtaining approval from the central government for three progressive stages of status;

- Exploration stage - to obtain approval for detail exploration work comprising drilling, sampling, Heavy Mineral Sand grade analysis, geophysical logging, topography survey and bulk sampling.
- Feasibility study stage - to obtain approval for advance exploration and technical constraint work comprising mine method and design, geotechnical constraint, capex – opex study, financial model, HMS beneficiation study, market analysis, social – culture – environment study. This stage is based on findings from the exploration stage. An environment impact analysis document is also required in the stage as a step towards the production stage.
- Production stage - to obtain approval in principal for executing HMS mining operation based on feasibility report and impact analysis document. The IUP-OP was granted to PTIM in March 2010.

2.9.2 Agreements

CRM is not aware of any formal agreements, past or present, relating to the Mandiri tenement. There are believed to be a number of informal understandings between PTIM and local artisanal miners who are mining the HMS for gold within the tenement and selling HMC to PTIM for processing through the plant.

2.10 Environment, social and culture factors

PTIM has advised CRM that it is currently not facing any environmental or social litigation and has commenced exploration activities and feasibility studies in accordance with applicable regulations. The tenement is situated in a production forest area. Some areas are overlapping with community rice farming and traditional hunting grounds. The community which is of multi-ethnic backgrounds appears to be supportive of PTIM's plans to develop the project.

The Mandiri deposit is situated on the flood plain of the Kahayan river, legally classified into production forest area and conversion production forest area, but with tribal land ownership also established on it. The land has recently been used for traditional plantations, rice farming and gold mining, which covers most of the concession area.

2.11 Climate

The project area³ has an average annual temperature of 26 to 32.5° C. The wind speeds are between 7 and 8 km/hour and humidity ranges from 75 to 79%. Rainfall is mainly concentrated during the wet season from October to April (>200mm).

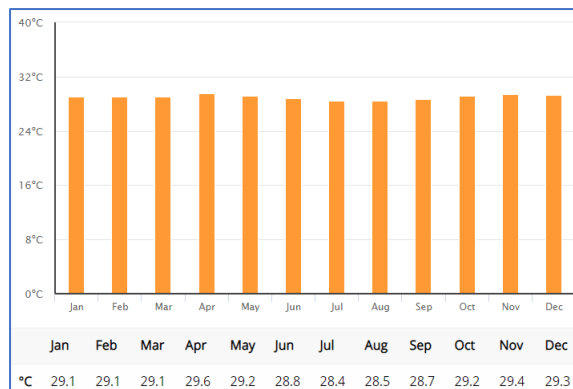


Figure 2-3 Annual temperature chart for Palankaraya

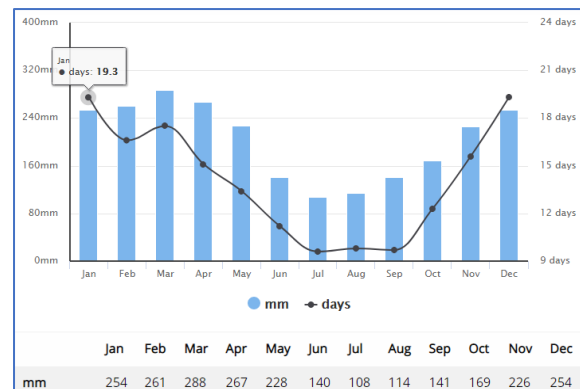


Figure 2-4 Annual rainfall and days of rain chart for Palankaraya

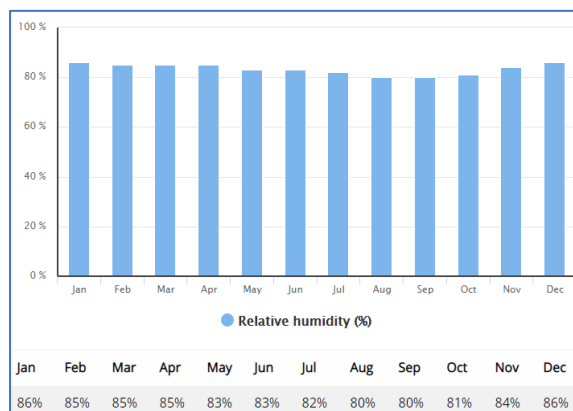


Figure 2-5 Annual humidity chart for Palankaraya

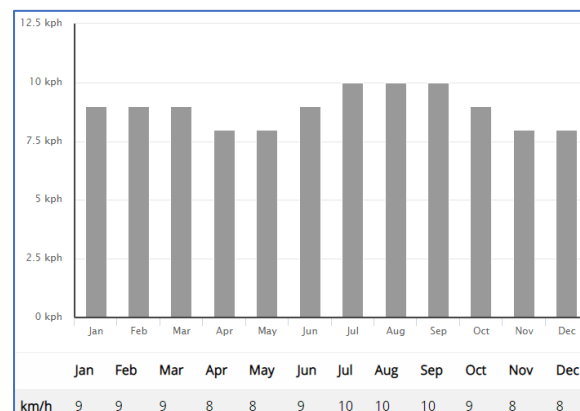


Figure 2-6 Annual wind speed chart for Palankaraya

Data source: <https://www.weather2visit.com/asia/indonesia/palangkaraya.htm>

2.12 Regional Mineralisation

Historically, the sedimentary basins of Central and Western Kalimantan have been mined for alluvial gold and in some areas also for diamonds. More recently, it has been recognised that the alluvium hosting the gold is also prospective for HMS.

In 2017 Indonesia was ranked 4th in world zircon production with production of 120,000 metric tonnes.

³ Palankaraya is located 170 km south of the project area.

For personal use only

2.13 Regional Geology

The Mandiri tenement is situated on the anticlinorium complex within Barito Basin with a pull apart sedimentary basin, occurring in Paleogene age, in Central Kalimantan. Mandiri syncline stratigraphy consists of Tertiary sedimentary rocks sequences; Middle Miocene to Holocene age.



Figure 2-7 Simplified geological plan of Kalimantan Island

3 MANDIRI PROJECT

3.1 Introduction

3.2 Exploration History

There is no record of any systematic exploration having been conducted over the Mandiri tenement area.

Artisanal miners have been active within the concession area for many years extracting gold and zircon using sluice boxes. The artisanal miners usually use a diesel pump to suck sand from shallow ponds to riffle boxes where the valuable components are recovered. Recovery is generally low and the depth of workings rarely exceed 4 m.



Figure 3-1 Area of previous artisanal workings at Mandiri



Figure 3-2 Artisanal miners panning for gold within the Mandiri tenement in January 2019



Figure 3-3 Gold tail in the pan from the Mandiri tenement

3.3 Geology

The HMS bearing strata of the Mandiri deposit is ancient Kahayan alluvium, which was deposited during the Holocene age. In general, alluvium has varying thickness of between 2 m and 10 m. The lithology consists of loose quartz, medium grained intercalated grey mudstone containing carbonaceous, shale and bed load stream product; coarse grain sand layer.

The following description of the alluvium and Werukin Formation are reproduced from Nila, Rustandi and Heryanto (1995)

Alluvium, Holocene age, pale black to dark brown peat (paludal deposit); loose sands, yellowish color, fine to coarse grained, unbedded (ancient Kahayan alluvium deposit); clay grey to brownish color, very soft, locally containing plant remains (tidal area); kaolinite clay. The thickness of this unit ranges from 50 to 100 m.

Werukin Formation (Tmw), middle Miocene to Pliocene, this formation comprises brownish black conglomerate, compact, clast consists of quartzite and basalt fragments, diameters 1 – 3 cm, open fabric with matrix of sand. Alternating with yellowish sandstone, medium to coarse grained, locally exhibit crossbedding. intercalated grey mudstone, rather soft, carbonaceous, contain sub-bituminous coal seam partly, appear as interbedded within sandstone bed with the thickness of 20 – 60 cm. The Werukin Formation has 300 m in thickness. Werukin Formation is deposited in a paralic environment. Werukin Formation is the one of main coal bearing Formation in Barito Basin.

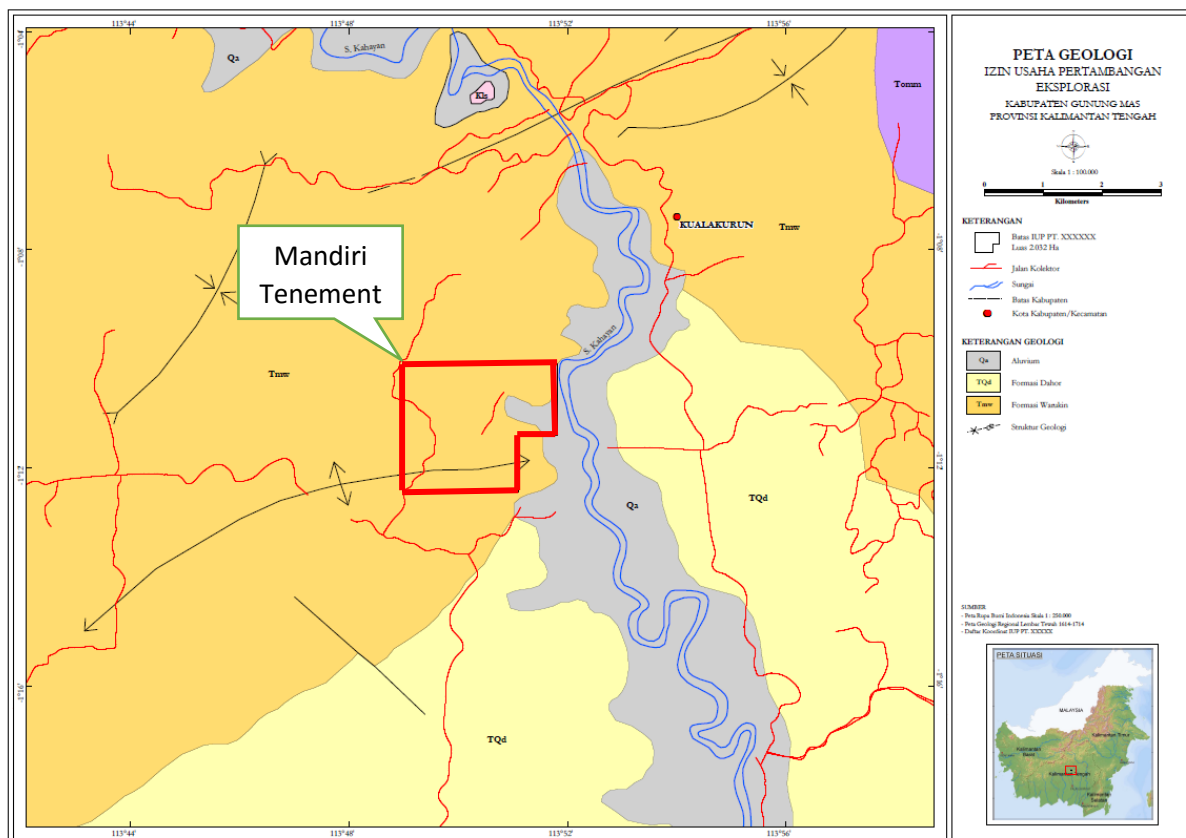


Figure 3-4 Geological map of the Mandiri tenement area

3.4 Database

The technical database for the project is very scant consisting of 52 auger drill holes, XRF analyses, HM content, slimes content and oversize content determinations and mineral assemblage data.

While the exploration database might be small a large quantity of material from the tenement area has been processed through the plant owned by PTIM providing valuable information regarding the mineralogy and characterisation of the heavy mineral assemblage.

3.5 Mineralisation

Geologically the HMS deposit at Mandiri is a placer deposit formed in a flood plain environment by concentration of heavy minerals, mostly zircon (ZrSiO_4), rutile (TiO_2), leucoxene (FeTiO_3 , TiO_2) and ilmenite (FeTiO_3). Zircon is the most valuable component followed by rutile, leucoxene and ilmenite in terms of value given to the ore. Gold, platinum and cassiterite have also been identified in the concentrate with gold recovered from the processing plant. The deposit is overlain by the Werukin Formation. The heavy minerals within the source sediments attain an economic concentration by accumulation within low-energy environments within streams and most usually on beaches. In alluvial placer deposits the medium to high energy zones on the stream are the meandering, bars and channel zone. In these zones, the HM grains accumulate because they are denser than the quartz grains they occur with and become stranded. It is for this reason that alluvial placer deposits are often referred to as "strand-line deposits". The deposits are found in unconsolidated sand strata.

3.6 Geometry of the mineralisation

The mineralisation occurs as a tabular body within alluvium as a layer of between 2 m to around a maximum of 11.5 m.

3.7 Drilling Methods

A programme of auger drilling (phase 1) and surface geological mapping was conducted in November to December 2018 with a second and third phase of auger drilling completed during January and February 2019.

The phase 1 auger drilling was undertaken using a 55 mm blade barrel auger at 200 m spacing and covered an area of 470 ha, or 12.50 % of the total concession area of 2,032 ha. A total of 18 hand powered auger holes were completed and all holes intersected the target alluvium bed. Based on the surface geological mapping it is estimated that the tenement contains about 1,100 ha of mineralised alluvial sand. About 60% of the mineralised area has been disturbed by artisanal mining activity but it is noted that this activity was only over shallow depths and the recovery was very poor.

The phase 2 auger drilling used a motorised auger in an attempt to get samples at greater depth but most of the holes collapsed below the water table and the holes were terminated. The spacing of the holes were increased to 400 m by 800 m in an effort to get samples over the entire area of the HMS layer.

A total of 52 holes were completed

For the phase 1 and 2 drilling 35 holes intersected alluvium but only 5 holes reached the basement with a maximum thickness of 11.5 m.

The auger samples were collected in 1 m intervals and placed in core trays prior to being placed in plastic bags for storage. Sub-samples were sub-sampled using the cone and quartering method.

3.7.1 Recovery

During auger drilling, core logging was undertaken by the site geologist with the details of the core recovery recorded for each run. Core recovery was generally high for samples above the water table. Once the water table was reached the holes generally collapsed and the hole was abandoned.



Figure 3-5 Mechanical auger drill used during phase 2



Figure 3-6 Cone and quartering of samples

3.7.2 Sampling

The HMS core samples were carefully recovered and placed in open PVC trays and sampled at 1 m sample spacing which was then delivered for storage at Palangkaraya by the site geologist. The down-hole alluvial strata and sedimentary rocks were logged by the site geologist.

Features recorded during logging included lithology, colour, grain size, boundary contact with adjacent lithologies and a general description of the material.



Figure 3-7 Core from auger hole DA-229 laid out for logging

The samples were delivered to PTIM's office in Palangkaraya where the samples were analysed for Zr, Ti, Th & Fe using an Olympus portable XRF unit. Sub-samples were prepared by cone and quartering and submitted for HM%, slime% and oversize% in addition to a range of elemental analyses as a check to the Olympus analyses.

Sampling Methodology

1. Clean the core from the other materials,
2. Record the range depth of the sample accurately,
3. Visually estimate the type of slimes and percentage,
4. Determine the type of Tertiary sediment and its boundary,
5. Ensure the Heavy Mineral Sand is free from contamination material (organic or inorganic),
6. Heavy Mineral Sand more than 1 m in thickness sampled based on 1 m sample interval,
7. Individual samples dried under the sun,
8. The dried sample was sub-sampled using the cone and quarter method,
9. Pack sample (weight 1 kg per sample) in plastic bags and assigned a unique sample number and sent to Palangkaraya office,

3.8 Survey control

All auger holes and sample sites were recorded using a Garmin 60cs hand held GPS unit. The estimated error is in the order of ± 15 m.

RLs were not recorded as the tenement area is relatively flat. The mineralised horizon either outcrops or at most is beneath a 1 m soil horizon. The mineralised intersection was composited over

the length of the alluvium intersection and the unit was continuous over the area sampled with no evidence of structural disruption.

3.9 Density

A density factor was estimated for each mineralised intersection based on the SG calculated for each ore block on the basis of its interpolated HM content according to the accepted industry standard formula $SG = 1.686 + (0.0108 \times HM\%)$; The average density for the deposit is 1.75.

3.10 Analyses

Analyses for Zr, Ti & Fe were made on individual 1 m samples in the field using an Olympus portable XRF unit. A composite sample for each hole was prepared and submitted to the UPTD Laboratorium Energi Dan Sumber Daya Mineral for analysis by XRF.

Table 3-1 Basic statistics for mineralised intervals for the laboratory analyses

Item	Minimum	Maximum	Mean
Zirconium %	0.93	1.65	1.26
Titanium %	0.43	1.21	0.91
Iron%	0.78	1.90	1.30
Zircon% - calculated	1.86	3.32	2.53
Rutile% - calculated	0.08	0.22	0.17
Ilmenite% - calculated	1.22	3.40	2.57
HM% - calculated	3.96	6.52	5.26

Note: zircon, ilmenite and rutile content was calculated from elemental Zr, & Ti. The ratio of rutile to ilmenite was based on production data from the plant.

Table 3-2 Basic statistics for the HM, slime, oversize and mineralised intervals

Item	Minimum	Maximum	Mean
HM%	2.94	9.10	6.91
Slimes5	6.24	9.85	8.70
Oversize%	6.42	21.23	15.44
Interval (m)	0.3	11.5	3.68

The distribution of the analyses for HM, slimes and oversize in percent and mineralised interval in metres are shown in the figures below.

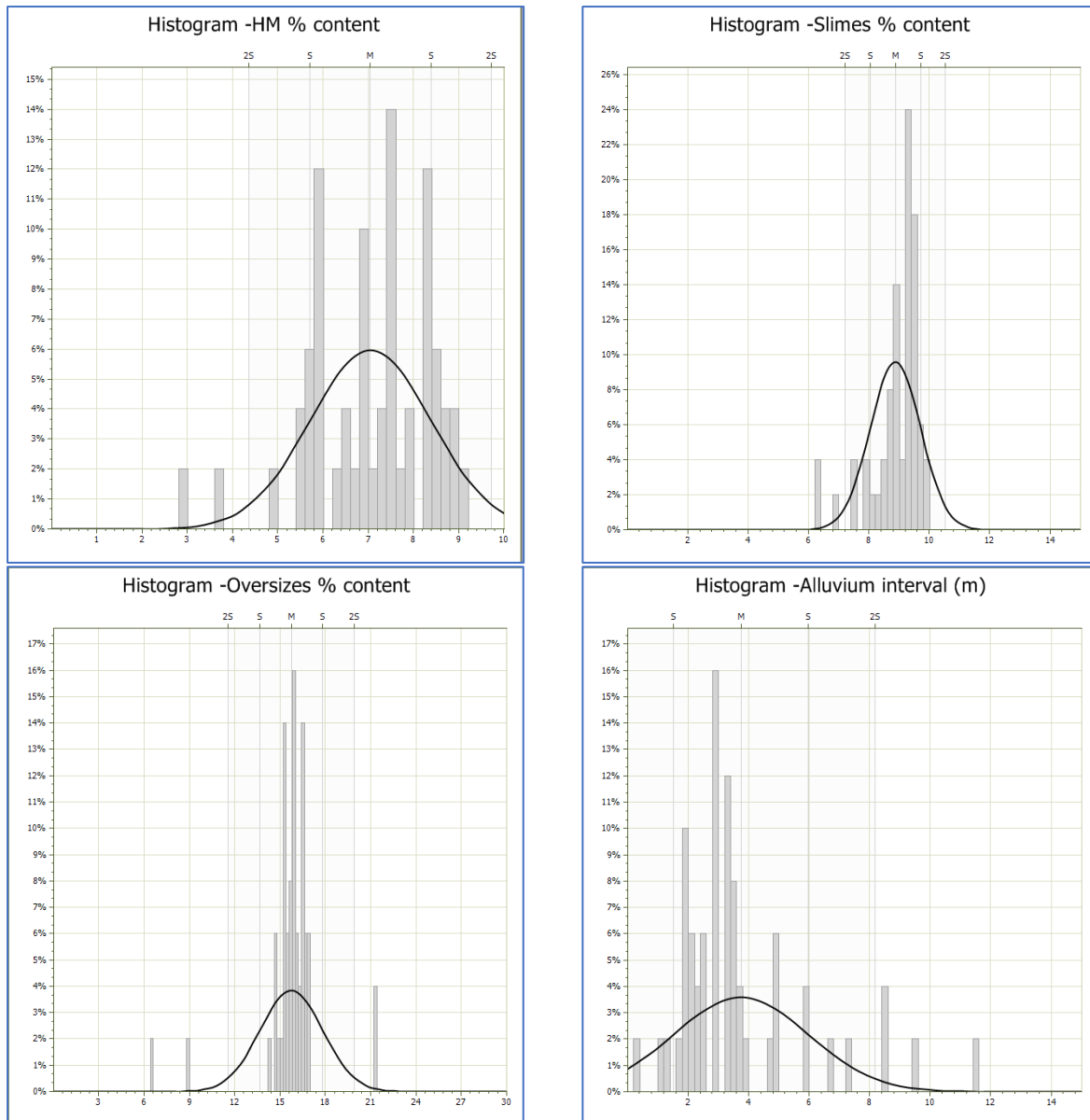


Figure 3-8 Histograms of the distribution of HM%, Slimes%, Oversize% & alluvium thickness (m)

A composite sample from which a concentrate was prepared was submitted for analysis of major and minor components commonly found in HMS deposits (Table 3-3).

Table 3-3 Analysis of HM composite sample concentrate from auger drilling at Mandiri

**LABORATORIUM PUSAT SURVEI GEOLOGI
(GEOLOGY LABORATORIES)**

Jl. Diponegoro No. 57, Bandung, 40122, Indonesia

Telp: 022-7203205, 6032207 Fax: 022-7202669, 6127941 E-mail: labgeologi@grdc.esdm.go.id

**HASIL UJI KIMIA METODE XRF
(XRF METHOD CHEMISTRY ANALYSIS RESULT)**

Nomer lab. (lab. number) : 089/L/GL/2.2/12/2018

Tanggal (date) : 20 Desember 2018

Kode sampel (sample code)	: IM.01	Tanggal diterima (received date)	: 17 Desember 2018
Kode lab. (lab. code)	: 291/2.2/18/1352	Tanggal diuji (analyzed date)	: 19 Desember 2018
Lokasi (location)	: Kalimantan Tengah	Metode uji (method)	: GL-MU-2.2
Kedalaman (depth)	: -	Metode preparasi (preparation method)	: Pressed Pellet
Pemilik (property)	: PT. INVESTASI MANDIRI		

Compound	m/m%	StdErr	El	m/m%	StdErr
ZrO2	42.09	0.25	Zr	31.16	0.18
SiO2	27.18	0.22	Si	12.71	0.10
TiO2	21.68	0.21	Ti	13.00	0.12
Fe2O3	3.97	0.10	Fe	2.77	0.07
Al2O3	1.55	0.06	Al	0.821	0.033
Cr2O3	1.09	0.05	Cr	0.748	0.036
HfO2	0.581	0.029	Hf	0.493	0.025
MgO	0.292	0.015	Mg	0.176	0.009
MoO3	0.202	0.012	Mo	0.135	0.008
MnO	0.147	0.007	Mn	0.114	0.006
V2O5	0.126	0.006	V	0.0703	0.0035
SnO2	0.104	0.005	Sn	0.0816	0.0041
Y2O3	0.102	0.005	Y	0.0804	0.0040
CaO	0.0608	0.0030	Ca	0.0435	0.0022
K2O	0.0273	0.0014	K	0.0227	0.0012
U3O8	0.0195	0.0034	U	0.0165	0.0029
Nb2O5	0.0188	0.0034	Nb	0.0131	0.0024
La2O3	0.0177	0.0027	La	0.0151	0.0023
Yb2O3	0.0153	0.0028	Yb	0.0134	0.0024
ZnO	0.0135	0.0013	Zn	0.0108	0.0010
OsO4	0.0134	0.0029	Os	0.0100	0.0022
Sc2O3	0.0100	0.0012	Sc	0.0065	0.0008
Ga2O3	0.0049	0.0007	Ga	0.0036	0.0005
GeO2	0.0029	0.0007	Ge	0.0020	0.0005

REST= 0.61 LOI



Kepala Subbidang Geologi Dasar dan Terapan
sebagai Manajer Teknis,

Aries Kusworo, S.T., M.T.
NIP. 197203112006041001.

Catatan (notes):

Hasil pengujian ini hanya berlaku untuk sampel yang diuji (this analysis result is only valid for the tested sample).

3.11 QA/QC

Some basic QA/QC work was carried out to confirm the accuracy and precision of the sampling work. This included twinned auger holes, Certified Reference Material and duplicate sample analyses.

3.11.1 Twinned auger holes

Two auger holes were twinned by a second hole drilled approximately 3 m apart. The holes are designated with a suffix "R". The second twinned hole was only 1.2 m in depth and no samples were collected. The results for auger holes DA-206 & DA-206R are presented in Table 3-4.

Table 3-4 Results of twinned auger drilling

Hole-ID	East-	North-	Depth	Interval	HM%
DA-206	818591	9869569	4	4	8.45
DA-206R	818611	9869571	4.6	3.6	8.22

Hole-ID	Zr (%)	Ti (%)	FE (%)	Zircon (%)	Rutile (%)	Ilmenite (%)	HM (%)
DA-206	1.66	1.07	1.6	3.47	0.19	2.93	6.59
DA-206R	1.80	1.08	2.03	3.62	0.20	3.05	6.86

3.11.2 Standards

A set of six standards were purchased to test the accuracy of the Olympus portable XRF unit. The results (Table 3-5) are equivocal and probably due to the different matrix of the samples relative to HMS material.

Table 3-5 Results of testing certified reference material

Standard	Reading 11		Reading 2		Reading 3		Reading 4		Reading 5	
	Zr (%)	Ti (%)	Zr (%)	Ti (%)	Zr (%)	Ti (%)	Zr (%)	Ti (%)	Zr (%)	Ti (%)
OREAS 461	656	2.75	633	2.68	641	2.73	669	2.73	686	2.7
Certified value	603	1.84								
AMIS 0304	1135	1.39	1193	1.36	1154	1.35	1190	1.39	1112	1.38
Certified value	1002	1.08								
OREAS 465	1703	9.74	1665	9.72	1676	9.59	1676	9.45	1657	9.58
Certified value	1879	6.30								
OREAS 98	212	2863	225	3009	228	3128	212	3079	208	3014
Certified value	67	2398								
OREAS 045e	363	8645	368	8632	361	8803	371	9257	358	9115
Certified value	242	5840								

The standard OREAS-461 was analysed after approximately every 10 sample readings with a mean value of 660 ppm Zr.

Table 3-6 Results of routine analysis of standard OREAS-461 for Zr

Zr ppm	Zr ppm	Zr ppm	Zr ppm
668	655	672	668
645	664	644	
664	664	644	
672	668	664	

3.11.3 Duplicates

No duplicates were specifically collected as part of the QA/QC which is an item that will need to be changed for future drilling programmes.

One composite sample previously laboratory analysed was recovered from the laboratory and analysed by the Olympus XRF unit (Table 3-7). Similarly, samples analysed in the field by the Olympus XRF unit were submitted for laboratory analysis (Figure 3-9 to Figure 3-12) at UPTD Laboratorium Energi Dan Sumber Daya Mineral.

Table 3-7 Results of Olympus XRF compared to Bandung Laboratory – Composite HM concentrate

Oxide	Bandung Laboratory XRF results	Olympus XRF	
		Reading 1	Reading 2
ZrO ₂	42.09	41.96	40.47
TiO ₂	21.68	23.52	21.63
Fe ₂ O ₃	3.97	6.12	5.47
SiO ₂	27.18	14.82	17.41
Al ₂ O ₃	1.55	1.73	2.07

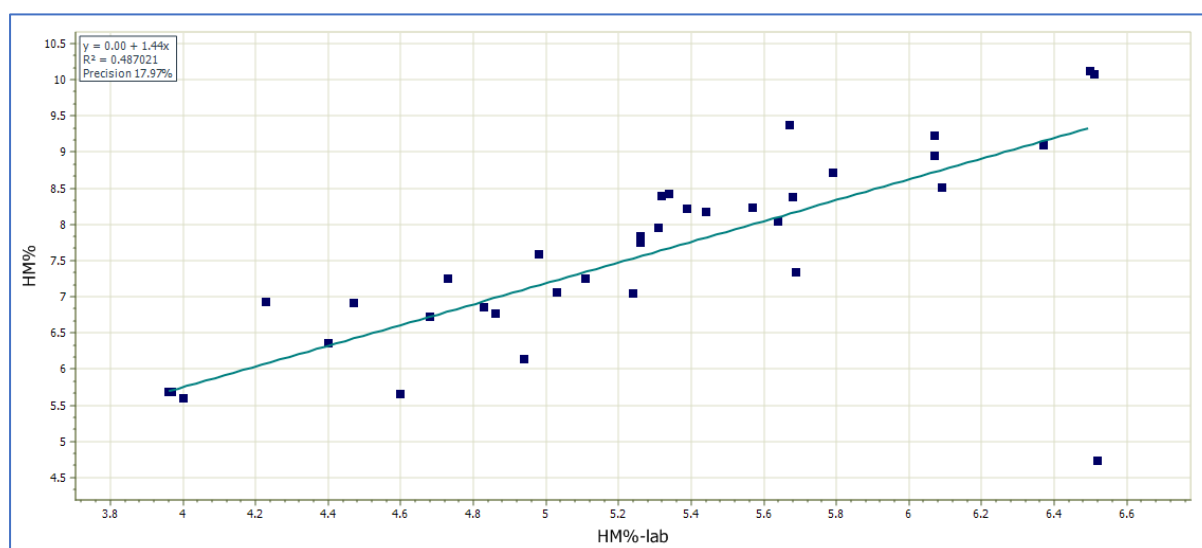


Figure 3-9 HM% Plot of field analyses (y-axis) relative to laboratory XRF results

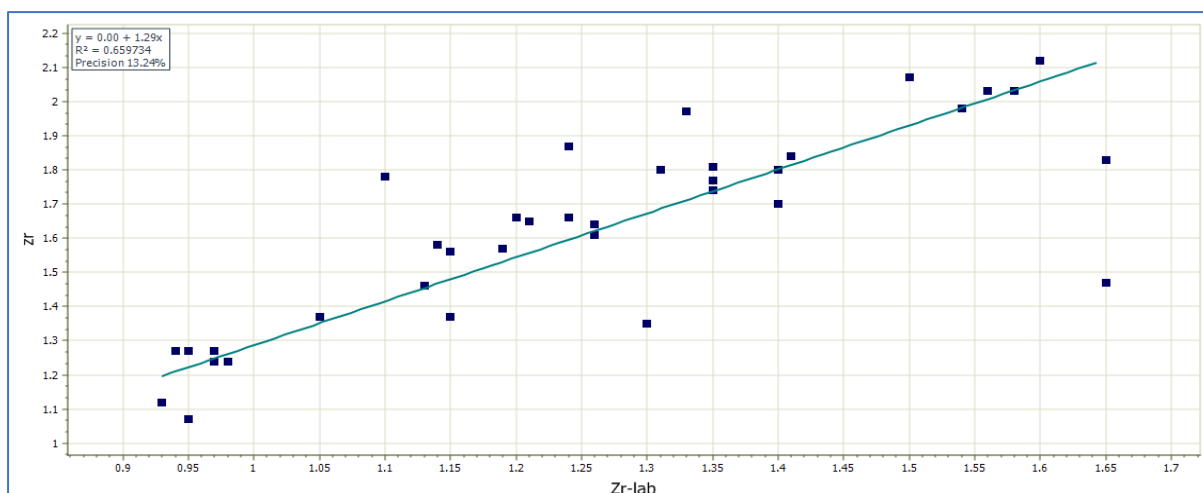


Figure 3-10 Fe% Plot of field analyses (y-axis) relative to laboratory XRF results

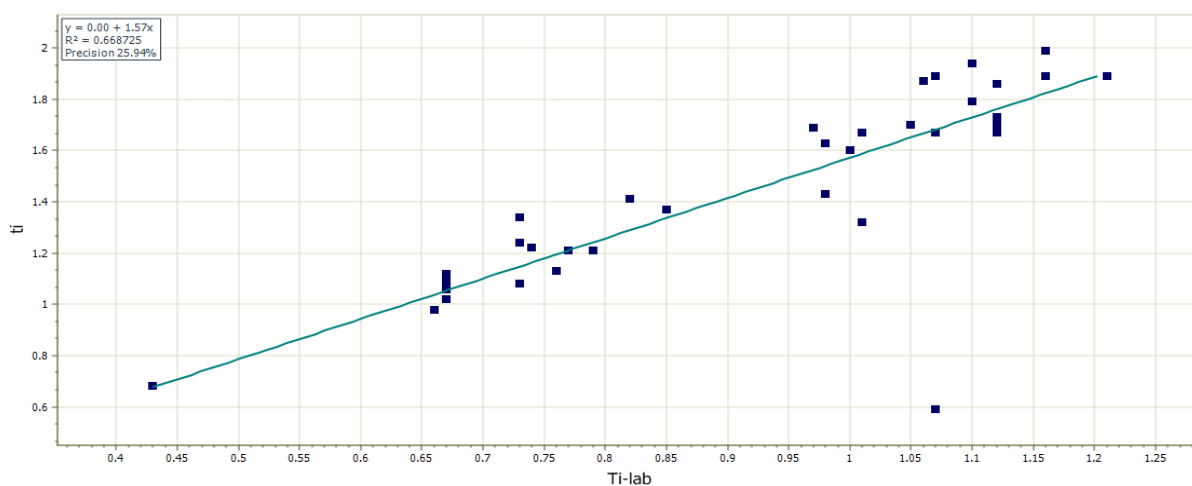


Figure 3-11 Ti% Plot of field analyses (y-axis) relative to laboratory XRF results

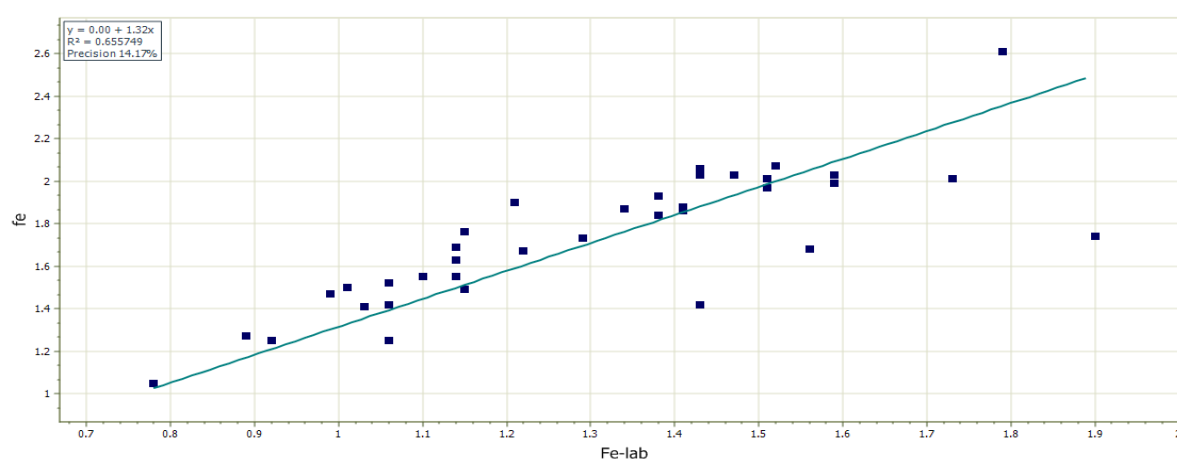


Figure 3-12 HM% Plot of field analyses (y-axis) relative to laboratory XRF results

4 MINERAL RESOURCE ESTIMATION METHODOLOGY

4.1 Estimate Procedure

CRM carried out this resource estimate for Mandiri Heavy Mineral Deposit. The estimate was made by Dr John Chisholm, Principal Geologist. It is reported in accordance with the 2012 Edition of the JORC Code. The estimate employed Inverse Distance modelling method to produce an ore block model (OBM) of the mineralisation within the deposit. Micromine Version 18.0.846.3 software was used for the production of the OBM.

4.2 Upper Cuts

Based on the distribution of the analytical results no upper cuts were applied.

4.3 Previous Mineral Resource Estimates

CRM is not aware of any previous mineral resource estimates for the Mandiri Project.

4.4 Ore Reserves

There are no Ore Reserves current for the Mandiri Project.

Notwithstanding the fact that there are no defined Ore Reserves there is current production from the tenement by artisanal miners. Production of HMC from the tenement is available for the past year (Figure 4-1). a total of 7,269 t of HM concentrate was purchased from the artisanal miners.

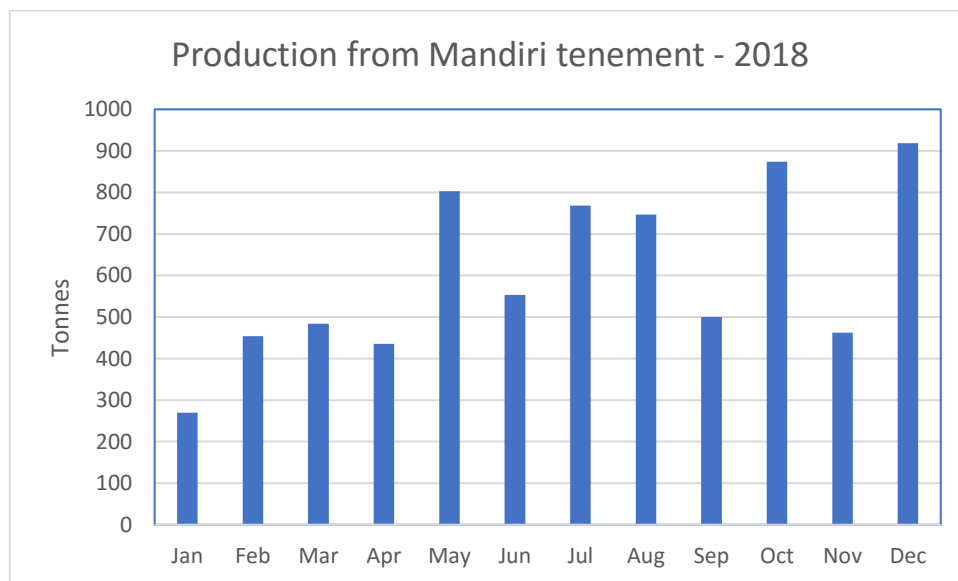


Figure 4-1 Monthly HMC production from the Mandiri tenement during 2018

It is not possible to determine the grade of the Mandiri HMS on the basis of the mined material as the artisanal miners do not record the volume of sand processed and modify their recovery process to maximise recovery of zircon at the expense of reduced ilmenite and rutile recovery. The artisanal miners are paid for concentrate produced based on the zircon content which is variable.

Information regarding the mineralogy is provided by the mineralogical content of a 551 t batch of dry high grade zircon concentrate which does not reflect the ratio of rutile to ilmenite in the deposit

as most of the rutile and ilmenite has been reported to the rutile/ilmenite product during the beneficiation process.

Table 4-1 Mineralogical composition of a 551 t dry weight sample of high grade zircon concentrate from the Mandiri Tenement

Mineral	Weight	Relative %
Zircon	358 t	64.97 %
Mixed ilmenite	104 t	18.87 %
Rutile	13 t	2.36 %
Monazite mix	4 t	0.73 %
Trash	72 t	13.07 %
Gold	1041 g	1.89 g/t
Total	551 t	100.00 %

Note: The feedstock sample was obtained via contracted artisanal miners who are only engaged for the purposes of extracting Zircon.

The relative percentage of the minerals comprising the mineral assemblage for the Mandiri HMS deposit (Table 4-2) based on actual production data for a 12 months period from the PTIM processing plant and supported by chemical analyses is consistent with the results of the mineralogical composition of the 551 t sample referred to in Table 4-1. All data used in the above analysis was supplied by PTIM during the actual site visit in January 2019.

Table 4-2 Mineral assemblage and contained tonnes of the components (unrounded)

Component	Zircon	Ilmenite	Rutile	Other	Waste +H ₂ O	Total
Relative %	68%	9.5%	8.5%	1%	13%	100%

4.5 Mineral Resource Estimation Parameters

4.5.1 Input data

Each auger hole was logged and the interval of alluvium recorder (Int). A composite sample was prepared for the interval and analysed by the Uptd Laboratorium Energi Dan Sumber Daya Mineral in Banjarbaru. HM%, slimes% and oversize% and a suite of 14 elements were analysed plus loss on ignition (LOI). The elements analysed included; ZrO₂, TiO₂ & Fe₃O₄. Based on mineral formulae and the ratio of rutile to ilmenite present in the mineral assemblage, zircon, rutile and ilmenite contents were estimated.

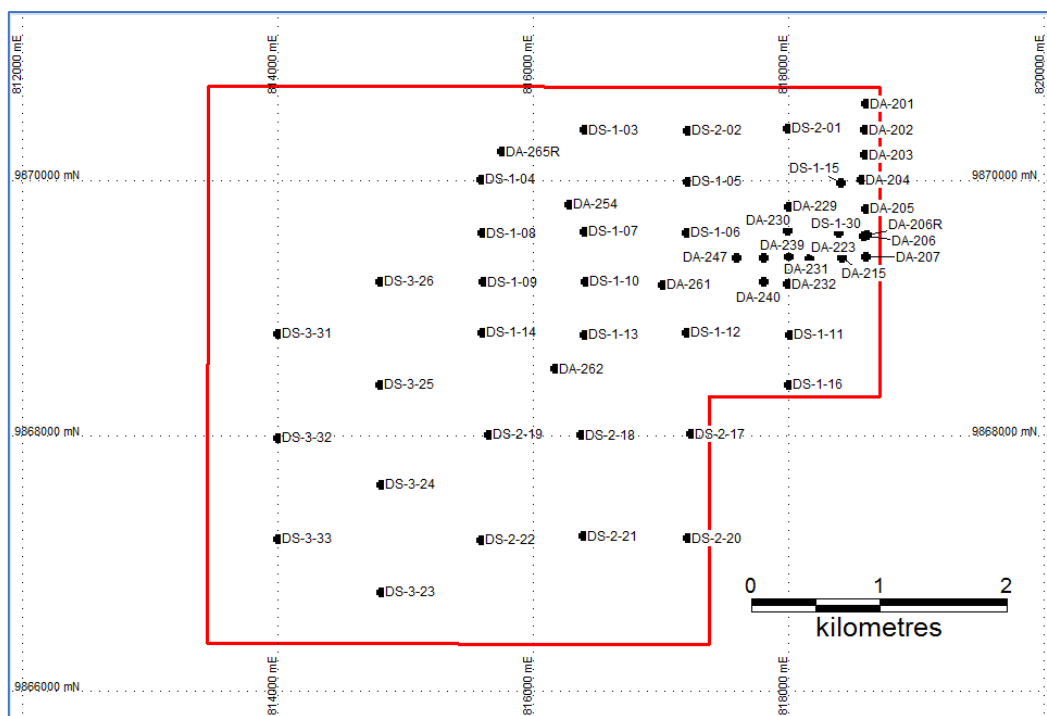


Figure 4-2 drill hole location plan

Table 4-3 Drill hole and mineral data used in the resource estimation

Hole-ID	East-UTM49M	North-UTM49M	From (m)	Interval (m)	Lab-HM%	Slimes%	Oversize%
DA-201	818600	9870600	0	5.00	7.45	9.74	15.58
DA-202	818597	9870398	0	6.00	8.32	8.94	14.99
DA-203	818599	9870200	0	3.00	5.72	9.36	16.23
DA-204	818573	9870005	1	2.00	5.94	9.21	15.65
DA-205	818600	9869782	2	3.00	6.54	9.45	14.73
DA-206	818591	9869569	1	3.00	8.45	9.45	14.76
DA-206R	818611	9869571	1	2.60	8.22	9.21	15.94
DA-207	818600	9869401	1	3.60	7.35	9.22	15.05
DA-215	818413	9869396	1	3.00	7.2	6.97	8.95
DA-223	818165	9869384	1	3.50	6.89	9.74	15.58
DA-229	817998	9869796	1	2.40	8.9	9.45	16.75
DA-230	817988	9869605	1	3.00	9.1	7.45	16.2
DA-231	818002	9869403	0	3.40	8.35	8.24	15.8
DA-232	817995	9869191	0	3.40	6.26	7.85	15.35
DA-239	817802	9869396	1	3.40	8.37	9.35	16.55
DA-240	817803	9869207	1	5.00	5.93	8.1	15.98
DA-247	817595	9869400	1	2.40	6.94	9.22	16.45
DA-254	816284	9869813	3	2.00	5.46	8.98	14.65
DA-261	817011	9869184	0	3.00	8.28	9.42	16.85
DA-262	816169	9868526	1	3.40	6.64	7.84	15.32
DA-265R	815751	9870226	1	1.40	5.52	8.73	15.92
DS-1-03	816403	9870398	3	2.00	5.62	9.47	15.83
DS-1-04	815597	9870009	2	2.00	5.94	8.64	15.32

DS-1-05	817208	9869995	1	3.35	7.59	9.22	15.96
DS-1-06	817198	9869595	4	3.00	5.86	8.74	15.26
DS-1-07	816399	9869603	1	3.80	7.42	9.13	15.74
DS-1-08	815605	9869590	0	3.25	7.54	8.94	16.43
DS-1-09	815610	9869207	2	2.00	7.38	9.04	15.34
DS-1-10	816408	9869210	1	3.50	7.64	9.63	16.34
DS-1-11	818007	9868793	4.5	2.50	6.84	8.64	15.28
DS-1-12	817198	9868810	4.45	0.30	2.94	7.52	6.42
DS-1-13	816405	9868795	1	3.60	7.42	9.31	15.42
DS-1-14	815605	9868810	1	2.20	7.52	8.93	16.42
DS-1-15	818406	9869981	0	4.65	8.42	9.53	16.65
DS-1-16	818001	9868403	0	3.00	5.98	8.98	15.84
DS-1-30	818393	9869595	1	3.70	8.73	8.43	16.2
DS-2-01	817995	9870409	0	2.60	5.75	6.24	21.23
DS-2-02	817212	9870393	0	4.00	6.84	8.85	16.57
DS-2-17	817234	9868017	0	1.80	4.82	9.5	15.8
DS-2-18	816379	9868007	0	8.60	7.89	8.45	15.21
DS-2-19	815656	9868011	0	1.20	3.72	9.85	14.36
DS-2-20	817207	9867200	0	2.20	6.42	9.23	16.54
DS-2-21	816393	9867216	0	7.35	8.94	9.24	16.89
DS-2-22	815594	9867188	0	6.00	8.62	9.22	16.85
DS-3-23	814810	9866776	0	11.50	7.42	9.35	16.04
DS-3-24	814809	9867620	0	6.70	6.85	9.42	15.88
DS-3-25	814804	9868403	0	5.00	7.96	9.45	16.75
DS-3-26	814798	9869211	0	0.00	0	0	0
DS-3-31	813999	9868803	0	9.60	8.24	8.95	15.94
DS-3-32	813998	9867985	0	8.50	8.52	9.82	16.52
DS-3-33	814004	9867194	0	2.15	5.84	6.24	21.23

4.5.2 Search dimensions

The search criteria were optimised for the primary target, the heavy minerals. CRM is, however, of the opinion that the criteria would also adequate for the estimation of the slimes and oversize content of the blocks once that information is received.

A spherical search distance of 550 m was used with an inverse distance cubed interpolation for the grade, density and mineralised interval.

4.5.3 Block Dimensions

OBM block dimensions for the Mandiri deposit were 100 m EW, 100 m NS, and the mineralised composite interval for the vertical dimension. Discretisation was not employed

Table 4-4 OBM block definitions

Area	Dimension	Min Centre	Block Size	Max Centre	Blocks
Mandiri	East	813400	100 m	818700	54
	North	9866400	100 m	9870700	44
	Z	0	1 m	20	1

Note: for the resource reporting the 1 m Z value was replaced with the interpolated interval thickness for each block.

4.5.4 Ore Block Models

A single, simple OBM was produced as a single layer. The use of the composited single interval for the mineralisation meant that a wireframe was unnecessary in order to constrain the volume and grade of the deposit.

The area within which the mineral resource was estimated represents most of the area of the tenement and was limited to the area of currently available drilling. It is likely that HMS is present outside of the current resource area but it cannot be quantified.

The distribution of HM, slimes and oversize content shows very little variation which is probably a function of the depositional environment wherein the deposit was formed. HMS deposits formed in an alluvial plain environment would show considerably less variability in grade than one formed as strandlines in a marine environment.

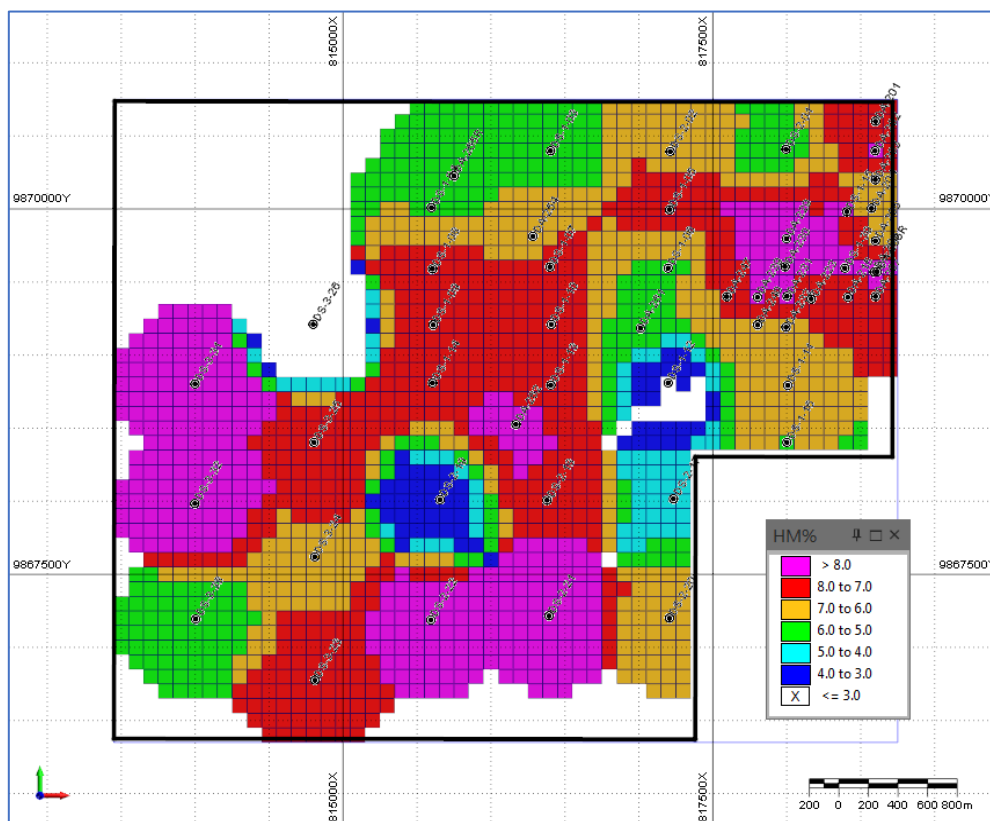


Figure 4-3 Mandiri deposit - Locations of OBMs relative to auger holes

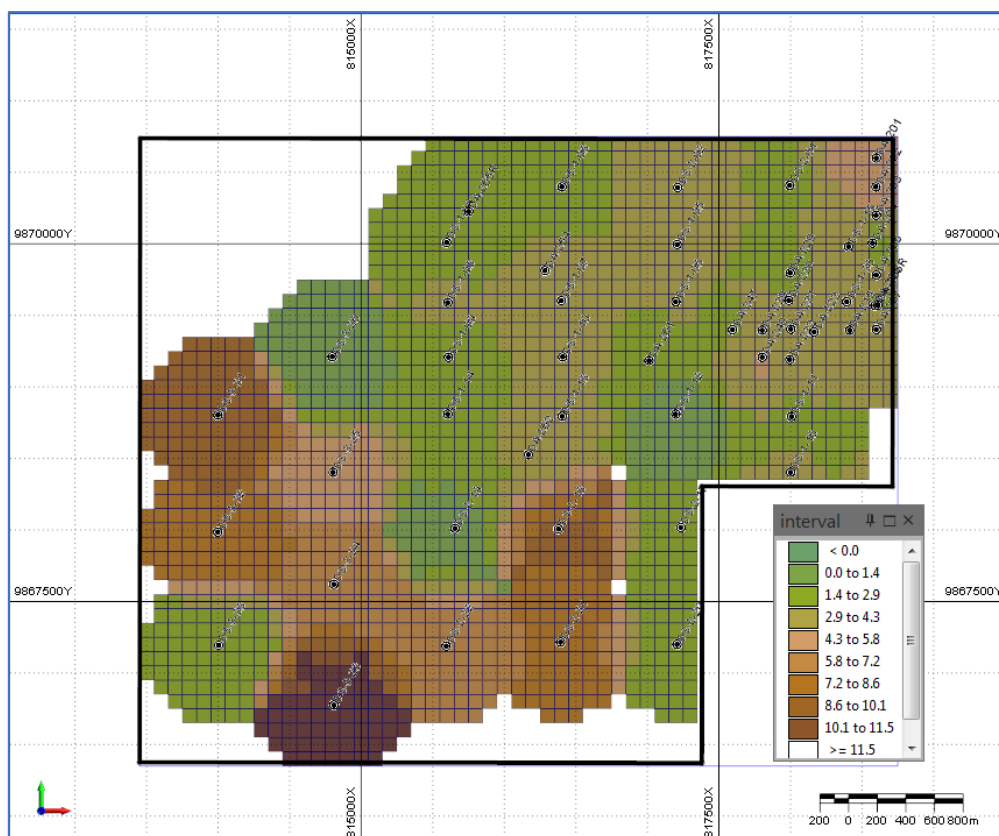


Figure 4-4 Mandiri deposit – Alluvium thickness (m) relative to auger holes

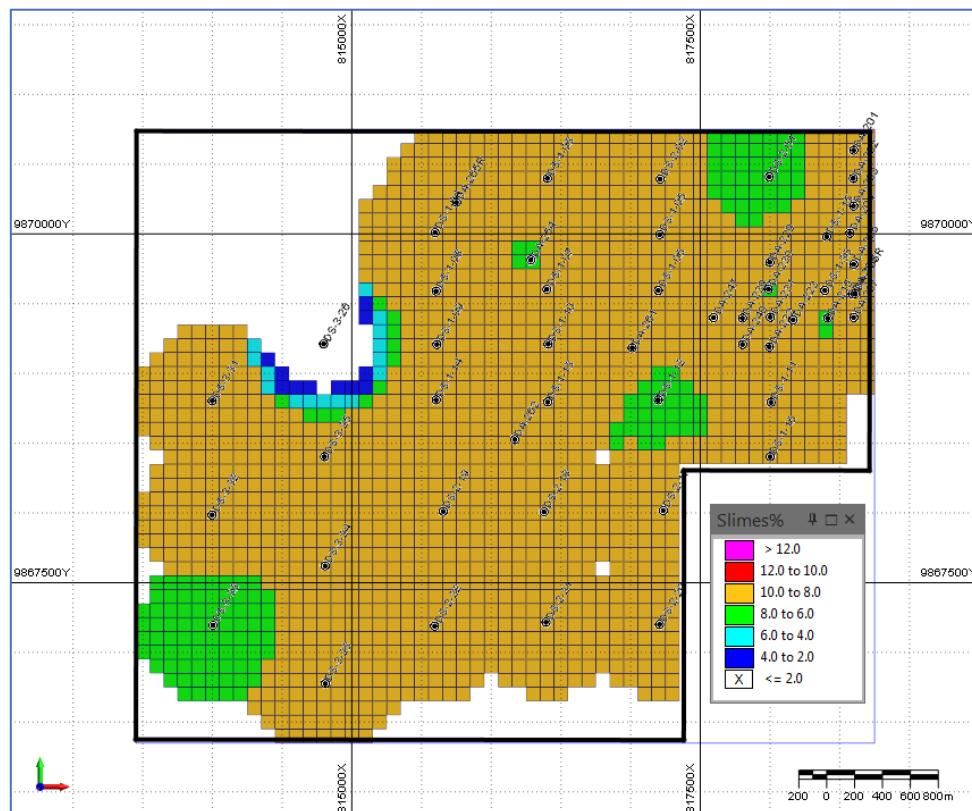


Figure 4-5 Mandiri deposit – Slimes % relative to auger holes

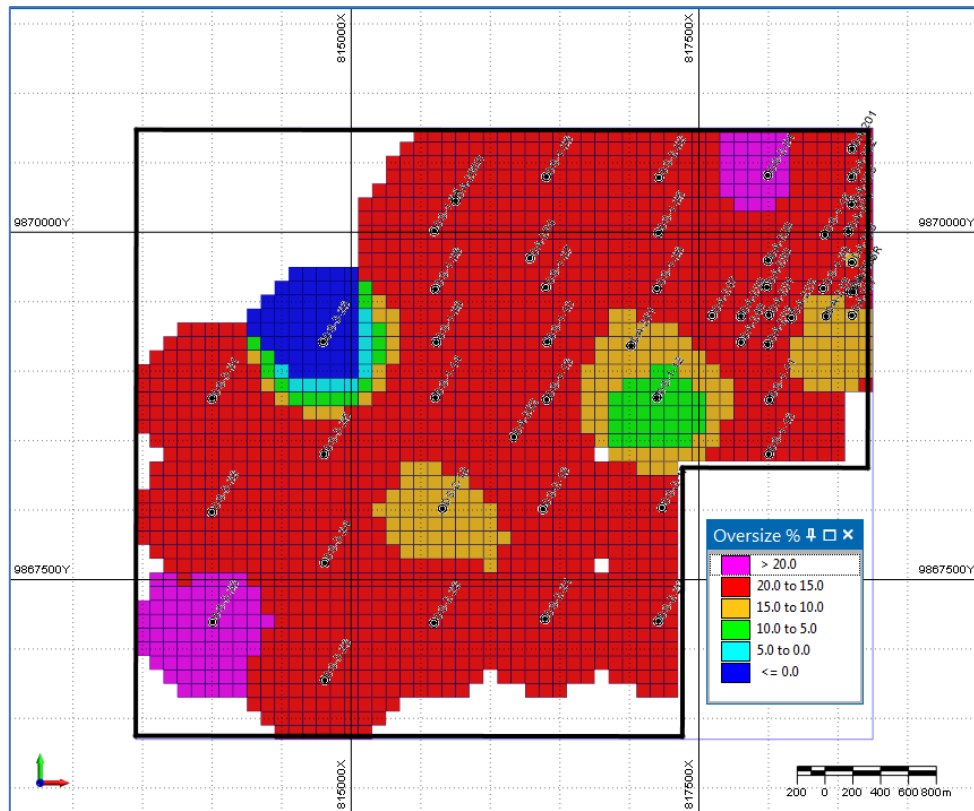


Figure 4-6 Mandiri deposit – Oversize % relative to auger holes

5 MINERAL RESOURCE STATEMENT

Resources are reported only for those portions of the OBMs that are within the Mandiri tenement. Resources were estimated and reported for zircon, rutile, ilmenite and HM.

5.1 Resource Classification

As both the geological host units and the mineralisation are continuous throughout the modelled area it is the Competent Person's opinion that these resources meet the criteria for classification as Inferred Mineral Resources. *(An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.)*

5.2 Resource Tables

Mineral Resources (unrounded) for the Mandiri Heavy Mineral Deposit within mining permit Izin Usaha Pertambangan-Operasi Produksi are set out in Table 5-1. The resources are reported at a lower block cut-off grade of 2% HM. As the mineral assemblage for the Mandiri tenement is well established the valuable heavy mineral (VHM) content represents approximately 86% of the HM content in the Mineral Resource estimate.

Table 5-1 Mineral Resources above 2% HM lower block cut-off grade (unrounded)

Area	Category	Tonnage (Mt)	HM (%)	Slimes (%)	Oversize (%)
Mandiri	Inferred	126.3	7.43	8.98	16.14

The Inferred Mineral Resources for the Mandiri HMS deposit are defined as 126 Mt containing 7% HM including 9% slimes and 16% oversize at a lower cut-off grade of 2%.

The mineral assemblage of the product from the Mandiri project is well established based on production records from the PTIM processing plant and confirmed⁴ by the certified laboratory analyses required by legislation for export product.

Table 5-2 Mineral assemblage and contained tonnes of the components (unrounded)

Component	Zircon	Ilmenite	Rutile	Other	Waste + h2o	Total
Relative %	68%	9.5%	8.5%	1%	13%	100%
Contained mineral	6.00 Mt	0.84 Mt	0.75 Mt	0.09 Mt	1.15 mt	8.82 Mt

Note: total may not agree due to rounding.

Based on the data available, the tonnage of contained zircon, ilmenite and rutile which together comprise the VHM is 7.59 Mt.

Resources are given in Table 5-3 at various lower block cut-off grades of contained HM.

⁴ Based on the known chemical composition of each mineral present in the assemblage.

For personal use only

Table 5-3 Inferred Resources by lower block cut-off grade (unrounded)

Category	Cut-off Grade (% HM)	Cumul. Tonnage (Mt)	HM (%)	Slimes (%)	Oversize (%)
Inferred	8	43.3	8.47	9.23	16.42
	7	88.4	7.99	9.18	16.19
	6	112.2	7.70	9.10	16.18
	5	125.0	7.53	9.01	16.25
	4	126.1	7.48	8.99	16.20
	3	126.1	7.44	8.99	16.16
	2	126.3	7.43	8.98	16.14

There is only minor material less than 2% HM.

5.3 Resource Validation

5.3.1 Input-Output Comparison

Comparisons between mean input analyses and estimated grades are given in Table 5-4 for each wireframe.

Table 5-4 Comparison of Input and Output Grades

Model	Input HM %	Estimate HM %
Mandiri	6.91	7.43

There is good agreement between input and output grades.

5.4 Previous Estimate Comparison

There are no known mineral resource estimates.

5.5 Exploration potential

5.5.1 Heavy Mineral Sands

The main area for potential mineralisation is below the water table as the auger drilling only tested the alluvial zone above the water table. The deepest auger hole that intersected bedrock was 10 m in depth. It is most likely that an additional mineralisation will be located below the currently defined resource. Testing this zone will require drilling using an air-core mechanised drilling rig.

In addition to the Exploration Target below the water table there is the potential for additional HMS mineralisation to be located to the northwest of the current resources below the younger Werukin Formation.

An Exploration Target which is an estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade, relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.

In the case of the Mandiri tenement the Exploration Target for HMS within the Mandiri tenement is in the order of 25 – 30 Mt of sand containing 4 - 7 % heavy minerals.

5.5.2 Gold

The tenement is known to contain alluvial gold which is being exploited by artisanal miners. It is not known how much gold the artisanal miners are producing but significant quantities of gold are being recovered by the PTIM processing facility which purchases heavy mineral concentrate from the artisanal miners. In the course of panning samples during the auger drilling the site geologists reported small gold grains in auger hole DA-206R.

Two analytical certificates accompanying rutile concentrate for export report gold values of 17 g/t and 37 g/t. In addition, platinum is reported at levels of 215 g/t and 101 g/t.

Laboratory analysis of concentrate from the processing plant reports gold grades of 5 – 7 g/t Au in concentrate but this is from concentrate purchased from artisanal miners who have already worked the material for gold.

The Exploration Target for gold mineralisation is 30 -50 Mt of sand at a grade – 1 – 5 g/t Au.

6 MINERAL PROCESSING

PTIM has constructed a processing plant located 23 km to the south of the Mandiri Project area. The plant incorporates the standard HM processing equipment in the form of dryers, gravity shaking tables, electro-static separators and electro-magnetic separators.

The current production capacity is in the order of 500 tpm with plans to increase the production rate to 1,000 t by March of 2019.



Figure 6-1 Shaking table at the PTIM plant



Figure 6-2 Electrostatic and electromagnetic separators installed at the PTIM plant

The separation process currently in operation at the PTIM processing plant is illustrated in Figure 6-3 and is as follows:

- HM feed material is passed over gravity shaking tables in a process that increases the zircon concentrate up to between 55% to 60%. At this stage, all waste sand is separated. Higher zircon concentrates can be achieved with the tables but at the cost of losing other mineral such as ilmenite and rutile.
- After the gravity shaking tables the concentrate is dried through a rotary dryer then cooled.
- The dried and cooled concentrate is then passed through an electro-static separation unit that separates metallic from non-metallic or non-conductive minerals. Zircon is separated from the ilmenite and rutile, and also precious metals such as gold and platinum.
- The final stage in the process is passing the zircon concentrate through an electro-magnet separation unit to produce a very high-grade zircon product of between 66 to 68% zircon. At this stage the TiO_2 and FeO_2 will be very low ($<0.1\%$) and the zircon product is classified as high-grade premium zircon sand.
- The black heavy minerals separated from the zircon during the electro-static separation is passed through the electro-magnet separation unit using different settings to separate ilmenite and rutile products. The rutile product will contain high grade TiO_2 , variable quantities of gold and platinum and small quantities of other non-magnetic minerals.

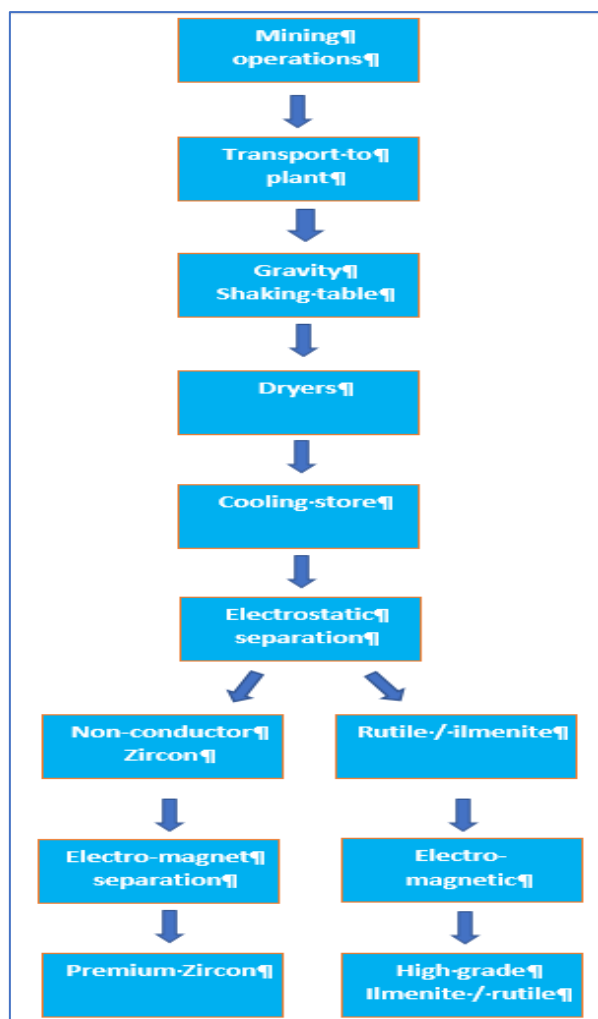


Figure 6-3 Schematic processing scheme at the PTIM plant

7 PROPOSED EXPLORATION AND BUDGET

The current auger drilling did not test for potential mineralisation below the water table. The testwork to date has relied upon chemical analyses to estimate the quantities of minerals present which is not unreasonable given the information provided by the production of HMC sourced from within the tenement and treated through the PITM processing plant. This level of information is the minimum acceptable for an Inferred Mineral Resource as defined by the JORC Code.

It is recommended that exploration should focus on both the Mandiri tenement and also on looking for additional resources within the region. The Mandiri tenement has demonstrated HMS resources which can be readily expanded by drilling below the water table. The region is well endowed with HMS potential as testified by the extensive areas of artisanal workings.

7.1 Mandiri tenement.

It is recommended that all the current auger holes be re-drilled using an air-core rig to test the entire thickness of alluvial sands down to the bedrock and extending the distribution of holes to cover the entire tenement area.

Samples are to be submitted for determination of HM%, slimes%, oversize% , gold and platinum.

Mineral assemblage characterisation needs to be undertaken in order to optimise the mineral processing and determining the valuable heavy mineral component (VHM) relative to the total heavy mineral (THM) component. A selected number of samples should be submitted for analysis by QEMSCAN technology or similar technology. This method uses electron microscopy to scan and identify the individual grains in samples providing information regarding grain size, grain shape and chemical composition.

7.2 Regional exploration

The inclusion of an existing HM processing plant within the Mineral Asset gives the company a great advantage in the area in that it can purchase HMC from artisanal miners as well as other small tenement holders. It provides the company with an incentive to acquire additional exploration tenements located within a reasonable transport distance from the PTIM plant.

The areas of artisanal workings can easily be recognised using satellite images. Recent cloud-free satellite imagery can be purchased, and the location of working plotted with respect to the regional geology and cadastral information.

7.3 Processing plant expansion

It is proposed to expand the capacity of the processing plant to 2,000 tpm by the end of 2019 to accommodate the quantity of HMC available from the artisanal miners and the expected production from the Mandiri tenement. The cost of the plant upgrade is expected to be in the order of UD\$2 million.

7.4 Proposed budget

Table 7-1 provides a summary of expenditure, by work item for exploration on the Mandiri tenement and also for wider regional exploration. All the costs are shown as an all-in inclusive cost, which includes the cost of drilling, sampling, assaying, personnel and all other on costs. All costs included in Australian dollars (A\$).

Table 7-1 Summary of Exploration Expenditure

Item	Year 1 (A\$'000)	Year 2 (A\$'000)	Total (A\$'000)
Mandiri Project			
Data compilation	\$10	\$10	\$20
Exploration drilling	\$800	\$200	\$1,000
Resource drilling	\$0	\$1,500	\$1,500
Resource Estimation	\$0	\$30	\$30
Sub -Total	\$810	\$1,740	\$2,550
Regional Exploration			
Data compilation	\$10	\$10	\$20
Geochemical surveys	\$20	\$20	\$40
Geophysical surveys	\$20	\$30	\$50
Exploration drilling	\$50	\$100	\$150
Sub -Total	\$100	\$160	\$260
Total	\$1,730	\$3,270	\$5,000

7.5 Merit

It is the Competent Person's view that the tenement is highly prospective for heavy minerals and gold.

8 DECLARATION

This ITAR has been prepared in accordance with the 2012 JORC Code and the 2015 VALMIN Code. Both industry codes are binding for all members of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. These codes are also requirements under Australian Securities and Investment Commission (ASIC) rules and guidelines and the listing rules of the Australian Securities Exchange (ASX).

No member or employee of CRM is, or is intended to be, a director, officer or other direct employee of the Company. No member or employee of CRM has, or has had, any share-holding, or the right (whether enforceable or not) to subscribe for securities, or the right (whether legally enforceable or not) to nominate persons to subscribe for securities in the Company. There is no agreement or understanding between CRM and the Company as to CRM performing further work for the Company. Fees for the preparation of this report are being charged at a commercial rate, the payment of which are not contingent upon the conclusions of the report. They total about \$15,000.

The information in relation to geology, exploration results and mineral resources is based on, and fairly represents, information and supporting documentation that has been compiled and reported by Dr John Chisholm, BSc Hons, PhD (Geol.), a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (CP). Dr Chisholm is a Principal Geologist of Continental Resource Management Pty Ltd, a geological consultancy, which was engaged by SPB to compile the geology, exploration history, Mineral Resources and potential of the Mandiri Project. Dr Chisholm has sufficient experience, which is relevant to the style of mineralisation, geology and type of deposit under consideration and to the activity being undertaken to qualify as a competent person under the 2012 JORC Code. Dr Chisholm consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Additional information relating to the geological setting of the deposit was contributed by Yulindra Christiawan. As a member of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and a Competent Person Indonesia, Resource Estimator for Coal and Nickel-laterite, he has sufficient experience relevant to the style of mineral deposit under consideration. Mr Christiawan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Yours faithfully



Dr John Chisholm
Continental Resource Management Pty Ltd

9 REFERENCES

Chambers, J. L. C., I. Carter, I. R. Cloke, J. Craig, S. J. Moss, and D. W. Paterson, 2004, Thin-skinned and thick-skinned inversion-related thrusting— A structural model for the Kutai Basin, Kalimantan, Indonesia, in K. R. McClay, ed., Thrust tectonics and hydrocarbon systems: AAPG Memoir 82, p. 614–634

Moss, S & L. C Chambers, J. (1999). Tertiary facies architecture in the Kutai Basin, Kalimantan, Indonesia. Journal of Asian Earth Sciences - J ASIAN EARTH SCI. 17. P 157-181.

E S Nila, E Rustandi, R Heryanto - Pusat Penelitian dan Pengembangan Geologi, 1995

10 GLOSSARY OF TECHNICAL TERMS AND ABBREVIATIONS

Air-core drilling	A rotary drilling technique that uses compressed air to cut a core sample and return fragments to the surface inside drill rods.
Auger	A method of drilling by which a sample of unconsolidated material is brought to the surface up the inclined flights of an auger.
Backshore	The zone of the shore or beach above the high-water line, acted upon only by severe storms or exceptionally high tides.
Basement	The oldest layer of igneous and metamorphic rocks in the earth's crust, covered by layers of more recent, usually unconformably overlain sedimentary rocks.
Clastic	A sedimentary rock composed of grains or fragments derived at a different locality.
Clay	A rock or mineral fragment or a detrital particle of any composition with a diameter <4 microns.
Composite	A number of discrete samples collected from a body of material into a single homogenized sample for the purpose of analysis.
Concentrate	Heavy mineral concentrates are usually prepared by tabling or wet sieving a very large sample of till or stream sediments (up to 20 kg may be routine). The heavy mineral concentrate collected at this stage is then further processed with heavy liquids using methylene iodide (SG = 3.3). The resultant concentrate then is separated into magnetic and non-magnetic fractions and it is the non-magnetic fraction which is usually analyzed.
Cut-off grade	The lowest grade of mineralised material that qualifies as ore or resource in a given deposit.
De-slimed	Clay-sized particles have been removed from crushed rock.
Digital terrain model (DTM)	A digital terrain model (DTM) provides a bare earth representation of terrain or surface topography and can be described as a three – dimensional representation of a terrain surface consisting of X, Y, Z coordinates stored in digital form. It includes not only heights and

	elevations but other geographical elements and natural features such as rivers, ridge lines, etc.
Exploration Target	An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource (JORC Code clause 17).
Foreshore	The seaward-sloping area of a shore that lies between the average high tide mark and the average low tide mark.
GIS	Geographic information system. It is a system designed to capture, store, manipulate, analyse, manage, and present spatial or geographic data.
Gneiss	High-grade metamorphic rock composed of alternating bands respectively rich in light and dark coloured minerals
Grade	Expression of relative quality of mineralisation (e.g. high-grade) or of numerical quality (e.g. 1.2% Ni).
Granitic	Descriptive term used for igneous rocks with a holocrystalline texture and anhedral constituents of a similar grain size, composed chiefly of orthoclase and albite feldspars and of quartz, usually with lesser amounts of one or more other minerals, as mica, hornblende, or augite.
Heavy mineral (HM)	An accessory detrital mineral of a sedimentary rock, of high specific gravity ($> 2.9 \text{ t/m}^3$), e.g., magnetite, ilmenite, zircon, rutile.
Heavy mineral assemblage	The suite of heavy minerals contained in a deposit.
Ilmenite	A titanium-iron oxide mineral (FeTiO_3).
Indicated Mineral Resource	That part of a Mineral Resource for quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
Inferred Mineral	That part of a Mineral Resource for which tonnage, grade, and mineral

Resource	content can be estimated with a low level of confidence.
JORC Code	The Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition). Prepared by The Joint Ore Reserves Committee. A compliance standard for professional and public reporting of Ore Reserves and Mineral Resources.
Kg	Kilogram
Leucoxene	A titanium oxide-rich heavy mineral formed by the alteration of ilmenite.
Lithified	The process by which a sediment composed of individual particles is converted into a coherent rock through cementation or compaction.
Logging	The practice of making a detailed record (a log) of the geological formations penetrated by a borehole.
Measured Mineral Resource	That part of a Mineral Resource for quantity, grade (or quality), densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.
Metamorphic	Descriptive of rock that has been altered by physical and chemical processes involving heat, pressure and/or fluids.
Mineral assemblage	Group of minerals commonly associated with another.
Mineral Asset	All property including (but not limited to) tangible property, intellectual property, mining and exploration Tenure and other rights held or acquired in connection with the exploration, development of and production from those Tenures. This may include the plant, equipment and infrastructure owned or acquired for the development, extraction and processing of Minerals in connection with that Tenure.
Mineral Resource	In-situ mineral occurrence for which there are reasonable prospects for eventual economic extraction. The location, quality, quantity, grade, geological characteristics, and continuity are known, estimated, or interpreted from specific geological evidence and knowledge. A 'Mineral

	Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction.
Mineralisation	The concentration of metals and their minerals within a body of rock.
Mineralogical	Connected with the scientific study of minerals.
Miocene	The epoch of geological time within the Cenozoic Era between about 5 and 23 million years ago.
Monazite	A rare phosphate mineral with a chemical composition of (Ce,La,Nd,Th)(PO ₄ ,SiO ₄). It usually occurs in small isolated grains, as an accessory mineral in igneous and metamorphic rocks such as granite, pegmatite, schist, and gneiss.
(Ore) block model	An (ore) block model is created using geostatistics and the geological data gathered through drilling of the prospective ore zone. The block model is essentially a set of specifically sized "blocks" in the shape of the mineralized orebody. Although the blocks all have the same size, the characteristics of each block differ. Once the block model has been developed and analyzed, it is used to determine the ore resources and reserves (with project economics considerations) of the mineralised orebody.
Ore Reserve	The economically minable part of a Measured and/or Indicated Mineral Resource.
Oversize	Sand material greater than 1 mm in diameter.
Pegmatite	Very coarse-grained igneous intrusive body, usually granitic and in dyke or sill form; may contain economically important minerals.
Precambrian	That portion of geological time older than about 545 million years ago.
Pre-feasibility stage	A project at a stage where a pre-feasibility study has been undertaken or is about to be commenced. A pre-feasibility study of a project is a precursor to a feasibility study. Its purpose is to examine the size, cost and value of the main components of the project in sufficient detail to ensure there is a

	solid basis for proceeding to the more costly and rigorous feasibility study.
Probable Reserve	A measured and/or indicated mineral resource which is not yet proven, but where technical economic studies show that extraction is justifiable at the time of the determination and under specific economic conditions.
Proven Reserve	A measured mineral resource, where technical economic studies show that extraction is justifiable at the time of the determination and under specific economic conditions.
QA/QC	QA/QC is the combination of quality assurance, the process or set of processes used to measure and assure the quality of a product, and quality control, the process of ensuring products and services meet consumer expectations.
Quaternary	The period of geological time from about 2.6 million years ago to the present.
Quartzite	A granular metamorphic rock composed predominantly of quartz; derived from quartz sandstone.
Resource category	Category of a mineral resource, such as Inferred, Indicated, Measured, Proven or Probable.
Resource modelling	Creating a model of a mineral resource through assessment of the quantity and quality of the data available including database management and verification, the creation of 2D and/or 3D geological and mineralisation models for the deposit, statistical and geostatistical analyses of the data and the determination of the most appropriate grade and density interpolation methods.
Royalty	A payment to the owner of mineral rights for the privilege of extracting the mineral from the ground based on a lease agreement. The royalty payment is based on a portion of earnings from production and varies depending on the type of mineral and the market conditions.
Rutile	A mineral containing titanium dioxide (TiO ₂).
Sandstone	A sedimentary rock composed primarily of sand sized grains.
Slimes	Clay material less than 45 microns (<45μ).

Specific gravity	The term specific gravity refers to the ratio of the density of a solid or liquid to the density of water at 4 degrees Celsius.
Tetrabromoethane (TBE)	A halogenated hydrocarbon, chemical formula C ₂ H ₂ Br ₄ .
THM	Total heavy minerals (concentrate). Components are typically rutile ilmenite, zircon and leucoxene.
Thorium	A chemical element with symbol Th. Thorium metal is silvery and tarnishes black when exposed to air, forming a dioxide.
TPM	Tonnes per month
Twin (Twinned holes)	A pair of parallel holes drilled close together.
Unconformably	The attribute of a series of younger strata that do not succeed the underlying older rocks in age or in parallel position, as a result of a long period of erosion or non-deposition.
Uranium	A chemical element with symbol U. It is a silvery-white metal in the actinide series of the periodic table.
VALMIN Code	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (2015 Edition). Prepared by The VALMIN Committee. A compliance standard for professional and public reporting of Mineral Asset valuations.
Valuable heavy minerals (VHM)	Heavy minerals with economic value. The principal valuable heavy minerals are ilmenite, leucoxene, rutile, and zircon.
μ or μm	Micron; a millionth of a metre.
XRF	An X-ray fluorescence (XRF) spectrometer is an x-ray instrument used for routine, relatively non-destructive chemical analyses of rocks, minerals, sediments and fluids. It works on wavelength-dispersive spectroscopic principles that are similar to an electron microprobe. It is typically used for bulk analyses of larger fractions of geological materials. The relative ease and low cost of sample preparation, and the stability and ease of use of x-ray spectrometers make this one of the most widely used methods for analysis of major and trace elements in rocks, minerals, and sediment.

Zircon	A mineral belonging to the group of nesosilicates. Its chemical name is zirconium silicate and its corresponding chemical formula is ZrSiO_4 .
--------	---

11 JORC TABLE 1 – FOR RESOURCE ESTIMATION

11.1 Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Auger samples were collected over 1m intervals and cone and quartered, bagged and dispatched to the laboratory Continuous core was collected Samples were panned onsite to identify the presence of HMS The mineralogy of the mineralization was established on the basis of production data from the PTIM processing plant that has been processing HMS concentrate from contract miners from within the Mandiri Concession. Refer to Estimation and reporting of mineral resources in Section 11.3 for details. Standard auger sampling was used
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> auger drilling was undertaken using 55 mm blade barrel
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> The HMS core samples were recovered and placed in open PVC trays and sampled by 1 m sample spacing The work proceeded slowly in order to maximise recovery. No relationship was noted.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative 	<ul style="list-style-type: none"> All auger samples were geologically logged in sufficient detail, recording all significant properties. All core logged and photographed.

Criteria	JORC Code explanation	Commentary
	<p><i>in nature. Core (or costean, channel, etc) photography.</i></p> <ul style="list-style-type: none"> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> All of the core was logged in entirety.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Core samples were placed in sample bags in 1 m intervals then later cone and quartered. The sample process was most appropriate for the sample type. Duplicate holes were drill and duplicate samples collected.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> analyses were recorded on each sample interval using a Olympus portable XRF unit. The cone and quarter samples were submitted to a laboratory for analysis. Laboratory determination of HM%, slimes% and oversize%. Certified reference material was used as were duplicate samples
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> None Two auger holes were twinned. All core logged and entered into a database. Assays were not adjusted.
Location of data points	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> Collars located by handheld GPS UTM 49M Adequate for Inferred Resources.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Average drill hole spacing is highly variable, ranging from 800m x 400m to 200m x 50m. • Drill spacing is appropriate for Inferred Resources for HM deposit • All samples composited for alluvial sand interval.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • Not appropriate for HMS deposit
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • All samples were in the care of company personnel at all times.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • Internal company audit and review. • In September 2019, CSA completed a site visit to review site protocols; discuss technical aspects with site team and JORC Code requirements; review the technical dataset that will support the mineral resource, including but not limited to, drilling and sampling QAQC, density measurements and assaying methodologies. During subsequent discussions with CSA it was indicated that all activities associated with the inputs to the mineral resource were conducted to a standard that allowed CSA to report the mineral resource in accordance with the JORC Code 2012

11.2 Section 2 Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> 	<ul style="list-style-type: none"> • The tenement is currently held under mining permit Izin Usaha Pertambangan – Operasi Produksi (IUP-OP) No. 16/DPE/IX/2010 issued by Bupati Gunung Mas on 2nd September 2010. • The tenement is held by PT.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>Investasi Mandiri</p> <ul style="list-style-type: none"> The Mandiri tenement is in good standing and no known impediments exist.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> There is no previous exploration data available
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The HMS bearing strata of the Mandiri deposit is ancient Kahayan alluvium, which was deposited during the Holocene age. In general, alluvium has varying thickness of between 2 m and 10 m. The lithology consists of loose quartz, medium grained intercalated grey mudstone containing carbonaceous, shale and bed load stream product; coarse grain sand layer. The deposit is typical of a HMS deposit formed in a continental environment.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> The drilling data includes 52 auger holes. All holes were drilled vertically to a maximum of 11.5 m. The average hole depth was 5.48 m. Collar coordinates and depth were recorded. RL was not recorded as the project area is flat. As stated the project area is flat and the mineralization occurs as a flat lying body with the land surface forming the top boundary of the mineralization.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical 	<ul style="list-style-type: none"> Composite samples were prepared and analysed by the laboratory. Field XRF results were made on individual samples and a weighted average calculated. Not applicable.

Criteria	JORC Code explanation	Commentary
	<p><i>examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Not applicable.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> Auger holes were vertical and the target HMD was horizontal. Flat lying horizontal alluvial body with the land surface as the top boundary. Geometry is well known.
Diagrams	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Appropriate maps and sections are available in the body of this report
Balanced reporting	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Reporting of results in this report is considered balanced.
Other substantive exploration data	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> Not applicable
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions, depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Further work will include air-core drilling to sample below the water table and holes will be at a closer spacing. Diagrams showing potential extensions included.

11.3 Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <i>Measures taken to ensure that data has not been corrupted by, for example,</i> 	<ul style="list-style-type: none"> Standard validation techniques have been applied to the data.

Criteria	JORC Code explanation	Commentary
	<p><i>transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></p> <ul style="list-style-type: none"> • <i>Data validation procedures used.</i> 	<ul style="list-style-type: none"> • The current database was compiled and validated in Micromine 2018.
Site visits	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> • Two site visits were conducted by Dr Chisholm on the 24th September 2018 and 22nd January 2019.
Geological interpretation	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> • Interpretation of the lithological boundaries and the proposal of a conceptual model for the mineralisation are supported by a sufficient amount of drilling. • Geological continuity is based upon a coherent and predictable model relevant to HMS deposits. • Further drilling and/or mapping is expected to refine the geological model in the future.
Dimensions	<ul style="list-style-type: none"> • <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i> 	<ul style="list-style-type: none"> • The Mandiri HMS deposit occurs over an area of 16 km². • Dips are flat • The width of mineralised zones varies from 0.35m to 5 m with an average of 3.06 m. • The mineralised zone tested is restricted to above the water table.
Estimation and modelling techniques	<ul style="list-style-type: none"> • <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological</i> 	<ul style="list-style-type: none"> • The resource estimations were generated using inverse distance cubed, using Micromine 2018.1 software. • No upper cut was applied. • Parent cell block sizes were 100 m x 100 m x intersection width. • Block model validation has been carried out by the Competent Person using input and output correlation. • All validation methods have produced acceptable results. • Current processing indicates that all VHM recovered. • • No deleterious element or minerals present. • Block size is appropriate for HMS deposits. • None • None • The body is known to be flat lying and

Criteria	JORC Code explanation	Commentary
	<p><i>interpretation was used to control the resource estimates.</i></p> <ul style="list-style-type: none"> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<p>continuous. No structural dislocations are known.</p> <ul style="list-style-type: none"> No grade cutting used as distribution of mineralisation grade is relatively uniform.
Moisture	<ul style="list-style-type: none"> <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> Tonnages are estimated on a dry basis. The auger samples were dried in the sun onsite. During the laboratory process the samples were further dried prior to heavy liquid separation.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> All Mineral Resources have been reported at series of lower cut-offs.
Mining factors or assumptions	<ul style="list-style-type: none"> <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i> 	<ul style="list-style-type: none"> It has been assumed that the Mandiri deposit will be mined by dredging. No dilution has been built into the resource model.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i> 	<ul style="list-style-type: none"> The relative percentage of the minerals comprising the mineral assemblage for the Mandiri HMS deposit is based on actual production data over a 12 months period from the PTIM processing plant. The plant feed was supplied to the processing plant by contract miners in the form of concentrate from small scale mining operations from within the Mandiri Concession area. The processing plant separates the various mineral components into high-grade products which can be easily visually identified. For example, the zircon product is very high-grade zircon whereas the mixed ilmenite produce will contain a variety of ilmenite forms. The effectiveness of the plant in the separation of the constituent minerals into pure and relatively pure products is supported by chemical analyses is consistent with the results of the mineralogical composition of the 551 t sample referred to in Table 1-1. The chemical analyses are carried out by independent laboratories by XRF analysis in accordance with the mineral export

Criteria	JORC Code explanation	Commentary
		<p>licence regulations.</p> <ul style="list-style-type: none"> For the purpose of reconciling chemical analyses with production records for material produced from the Mandiri project area it is assumed that all Zr is in the form of Zircon. All Ti is in the form of rutile and ilmenite in the proportion of 48% and 52%.
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> There are considered to be no significant environmental issues.
<i>Bulk density</i>	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> A density factor was estimated for each mineralised intersection based on the SG calculated for each ore block on the basis of its interpolated HN content according to the standard formula $SG = 1.686 + (0.0108 \times HM\%)$; The average density for the deposit is 1.75 which was used as a global density factor.
<i>Classification</i>	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The Mineral Resource has been classified in the Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including: <ul style="list-style-type: none"> Geological and grade continuity Data quality. Drill hole spacing. The Competent Person is in agreement with this classification of the resource.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> The resource estimate has not been externally been audited.
<i>Discussion of relative accuracy/</i>	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an 	<ul style="list-style-type: none"> The relative accuracy of the various resource estimates is reflected in the

Criteria	JORC Code explanation	Commentary
confidence	<p><i>approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></p> <ul style="list-style-type: none"> <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<p>JORC resource categories.</p> <ul style="list-style-type: none"> Inferred Resources are considered global in nature. The resource estimation results cannot be related to production records as the exact location of the plant feed is varied.

Schedule 2 Significant Accounting Policies

The following significant accounting policies set out below have been applied in the preparation and presentation of the financial information presented in Section 3 of the Explanatory Statement and are in accordance with International Financial Reporting Standards (“IFRSs”) issued by the International Accounting Standards Board (“IASB”) and IFRIC interpretations issued by the IFRS Interpretations Committee.

1. Basis of preparation

This financial information has been prepared on an accruals basis and is based on historical costs, applying the going concern basis of accounting. All amounts are presented in US dollars, unless otherwise noted.

2. Going Concern

The pro-forma financial information has been prepared on a going concern basis which contemplates the continuity of normal business activities and the realisation of assets and the settlement of liabilities in the normal course of business.

SPB incurred a net loss after tax for the year ended 30 June 2019 of AU\$797,866 (30 June 2018: AU\$1,205,666). The Statement of Financial Position as at 30 June 2019 shows that SPB had cash and cash equivalents of AU\$4,646 (30 June 2018: AU\$3,576) and a net current liability position of AU\$3,191,528 (30 June 2018: AU\$2,433,834 net current liabilities).

No adjustments have been made to SPB’s financial information relating to the recoverability and classification of the carrying amount of assets or the amount and classification of liabilities that might be necessary should SPB not continue as a going concern. Accordingly, the financial information has been prepared on a going concern basis.

Reverse Acquisition Accounting

When a transaction involves the transfer of consideration through the issue of share capital, the directors make an assessment of who is the accounting acquirer in the transaction by examining the following indicators of control, post-transaction, including a) the proportion of shareholder representation in the newly merged group from each transacting entity; and b) the ability of that shareholder group to influence control through its power over the governance and operations of the newly merged entity.

In applying the requirements of IFRS 3 *Business Combinations*:

- a) SPB becomes the ultimate legal parent entity to the Group; and
- b) Takmur, which is neither the legal parent nor legal acquirer, is deemed to be the accounting acquirer.

The pro-forma financial information incorporates the assets and liabilities of all entities deemed to be acquired by Takmur and the results of these entities for the period from which those entities are accounted for as being acquired by Takmur. The assets and liabilities of SPB acquired by Takmur are recorded at fair value whilst the assets and liabilities of Takmur are maintained at their book value. The impact of all transactions between entities in the Group are eliminated in full.

IFRS 3 *Business Combinations* requires that consolidated financial statements prepared following an RTO shall be issued under the name of the legal parent (i.e. SPB), but be a continuation of the financial statements of the legal subsidiary (i.e. Takmur, the acquirer for accounting purposes).

3. *Cash and cash equivalents*

Cash and cash equivalents include cash on hand, deposits held at call with banks, other and short-term highly liquid investments with original maturities of three months or less, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities on the statement of financial position.

4. *Loans and receivables*

Loans and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as “loans and receivables”. Loans and receivables are measured at amortised cost using the effective interest method, less any impairment. Interest income is recognised by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial.

5. *Inventories*

Inventories are measured at the lower of cost and net realisable value. The cost of the manufactured product includes direct materials, direct labour and an appropriate proportion of variable and fixed overheads. Overheads are applied on the basis of normal operating capacity. Costs are assigned on a first-in, first-out basis.

6. *Property, plant and equipment*

Each class of property, plant and equipment is carried at cost or fair value less, where applicable, any accumulated depreciation and impairment losses.

Plant and equipment

Plant and equipment are measured on the cost basis and therefore carried at cost less accumulated depreciation and any accumulated impairment. In the event that the carrying amount of plant and equipment is greater than the estimated recoverable amount, the carrying amount is written down immediately to the estimated recoverable amount and impairment losses are recognised either in profit or loss or as a revaluation decrease if the impairment losses relate to a revalued asset. An assessment of recoverable amount is made when impairment indicators are present

The carrying amount of plant and equipment is reviewed annually by directors to ensure it is not in excess of the recoverable amount from these assets. The recoverable amount is assessed on the basis of the expected net cash flows that will be received from the asset's employment and subsequent disposal. The expected net cash flows have been discounted to their present values in determining recoverable amounts.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. All other repairs and maintenance are recognised as expenses in profit or loss during the financial period in which they are incurred.

Depreciation

The depreciable amount of all fixed assets, excluding freehold land, is depreciated on a straight line basis over the asset's useful life to the company commencing from the time the asset is held ready for use

The depreciation rates used for each class of depreciable assets are:

Class of fixed asset	Depreciable rate
Buildings	5%
Plant and equipment	20%
Motor vehicles	25%

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains or losses are recognised immediately in profit or loss. When revalued assets are sold, amounts included in the revaluation surplus relating to that asset are transferred to retained earnings,

7. *Trade and other payables*

Trade payables and other payables are carried at amortised cost and represent liabilities for goods and services provided prior to the end of the period that are unpaid and arise when there is an obligation to make future payments in respect of the purchase of these goods and services.

8. *Lease*

Leases of fixed assets, where substantially all the risks and benefits incidental to the ownership of the asset (but not the legal ownership) are transferred to the company, are classified as finance leases,

Finance leases are capitalised by recognising an asset and a liability at the lower of the amounts equal to the fair value of the leased property or the present value of the minimum lease payments, including any guaranteed residual values. Lease payments are allocated between the reduction of the lease liability and the lease interest expense for the period,

Leased assets are depreciated on a straight-line basis over the shorter of their estimated useful lives or the lease term.

Lease payments for operating leases, where substantially all the risks and benefits remain with the lessor, are recognised as expenses on a straight-line basis over the lease term.

Lease incentives under operating leases are recognised as a liability and amortised on a straight-line basis over the lease term.

9. *Foreign currency translation and balances*

1) *Functional and presentation currency*

The functional currency of each entity is measured using the currency of the primary economic environment in which that entity operates. The consolidated financial statements are presented in United States dollars which is the Takmur's functional and presentation currency.

2) *Transaction and balances*

Foreign currency transactions are translated into functional currency using the exchange rates prevailing at the date of the transaction. Foreign currency monetary items are translated at the year-end exchange rate. Non-monetary items measured at historical cost continue to be carried at the exchange rate at the date of the transaction. Non-monetary items measured at fair value are reported at the exchange rate at the date when the fair values were determined.

Exchange differences arising on the translation of monetary items are recognised in the statement of comprehensive income, except where deferred in equity as a qualifying cash flow or net investment hedge.

Exchange differences arising on the translation of non-monetary items are recognised directly in equity to the extent that the gain or loss is directly recognised in equity, otherwise the exchange difference is recognised in the statement of comprehensive income.

3) *Group companies*

The financial results and position of operations whose functional currency is different from the Company's presentation currency are translated as follows:

- Assets and liabilities are translated at year-end exchange rates prevailing at the reporting date;
- Income and expenses are translated at average exchange rates for the period; and
- Exchange rate differences arising on translation of foreign operations are transferred directly to the foreign currency translation reserve in the statement of financial position. These differences are recognised in the statement of comprehensive income in the period in which the operation is disposed

10. *Income Tax*

The income tax expense (income) for the year comprises current income tax expense (income) and deferred tax expense (income).

Current tax and deferred tax are recognised in profit or loss except to the extent that they relate to a business combination or are recognised directly in equity or in other comprehensive income. Current tax liabilities (assets) are therefore measured at the amounts expected to be paid to (recovered from) the relevant taxation authority using tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred income tax expense reflects movements in deferred tax asset and deferred tax liability balances during the year as well as unused tax losses.

Current and deferred income tax expense (income) is charged or credited directly to equity instead of profit or loss when the tax relates to items that are credited or charged directly to equity.

Deferred tax assets and liabilities are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled and their measurement also reflects the manner in which management expects to recover or settle the carrying amount of the related asset or liability.

With respect to land and buildings measured at fair value, the related deferred tax liability or deferred tax asset is measured on the basis that the carrying amount of the asset will be recovered entirely through sale.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

Where temporary differences exist in relation to investments in subsidiaries, branches, associates and joint ventures, deferred tax assets and liabilities are not recognised where the timing of the reversal of the temporary difference can be controlled and it is not probable that the reversal will occur in the foreseeable future.

Current tax assets and liabilities are offset where a legally enforceable right of set-off exists and it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur. Deferred tax assets and liabilities are offset where: (i) a legally enforceable right of set-off exists; and (ii) the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities, where it is intended that net settlement or simultaneous realisation and settlement of the respective asset and liability will occur in future periods in which significant amounts of deferred tax assets or liabilities are expected to be recovered or settled.

11. *Subsidiaries*

Subsidiaries are entities controlled by the Company. The Company controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial information of subsidiaries are included in the pro-forma consolidated financial statements from the date on which control commences until the date on which control

ceases.

Inter-company transactions, balances and unrealised gains or losses between subsidiaries are eliminated. The financial information of the subsidiaries are prepared using consistent accounting policies and reporting date as the Company.

When the Group loses control of a subsidiary, a gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. All amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (ie reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable Accounting Standards). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IAS 39:Financial Instruments: Recognition and Measurement, when applicable, the cost on initial recognition of an investment in an associate or a joint venture..

Schedule 3 Summary of Stock Incentive Plan

The key terms of the Performance Rights and Option Plan (**Plan**) are as follows:

- (a) **Eligibility:** Participants in the Plan may be:
- (i) a Director (whether executive or non-executive) of the Company and any associated body corporate of the Company (each a **Group Company**);
 - (ii) a full or part time employee of any Group Company;
 - (iii) a casual employee or contractor of a Group Company to the extent permitted by ASIC Class Order 14/1000 as amended or replaced (**Class Order**); or
 - (iv) a prospective participant, being a person to whom the offer is made but who can only accept the offer if an arrangement has been entered into that will result in the person becoming a participant under subparagraphs (i), (ii), or (iii) above,
- who is declared by the Board to be eligible to receive grants of Awards under the Plan (**Eligible Participants**).
- (b) **Offer:** The Board may, from time to time, in its absolute discretion, make a written offer to any Eligible Participant (including an Eligible Participant who has previously received an offer) to apply for Awards, upon the terms set out in the Plan and upon such additional terms and conditions as the Board determines (**Offer**).
- (c) **Plan limit:** The Company must have reasonable grounds to believe, when making an offer, that the number of Shares to be received on exercise of Awards offered under an offer, when aggregated with the number of Shares issued or that may be issued as a result of offers made in reliance on the Class Order at any time during the previous 3 year period under an employee incentive scheme covered by the Class Order or an ASIC exempt arrangement of a similar kind to an employee incentive scheme, will not exceed 5% of the total number of Shares on issue at the date of the offer.
- (d) **Issue price:** Unless the Awards are quoted on the ASX, Awards issued under the Plan will be issued for no more than nominal cash consideration.
- (e) **Vesting Conditions:** An Award may be made subject to vesting conditions as determined by the Board in its discretion and as specified in the offer for the Awards (**Vesting Conditions**).
- (f) **Vesting:** The Board may in its absolute discretion (except in respect of a change of control occurring where Vesting Conditions are deemed to be automatically waived) by written notice to a Participant (being an Eligible Participant to whom Awards have been granted under the Plan or their nominee where the Awards have been granted to the nominee of the Eligible Participant (**Relevant Person**)), resolve to waive any of the Vesting Conditions applying to Awards due to:
- (i) special circumstances arising in relation to a Relevant Person in respect of those Performance Rights, being:
 - (A) a Relevant Person ceasing to be an Eligible Participant due to:
 - (I) death or total or permanent disability of a Relevant Person; or
 - (II) retirement or redundancy of a Relevant Person;
 - (B) a Relevant Person suffering severe financial hardship;
 - (C) any other circumstance stated to constitute “special circumstances” in the terms of the relevant Offer made to and accepted by the Participant; or

- (D) any other circumstances determined by the Board at any time (whether before or after the Offer) and notified to the Relevant Participant which circumstances may relate to the Participant, a class of Participant, including the Participant or particular circumstances or class of circumstances applying to the Participant; or
- (ii) a change of control occurring; or
- (iii) the Company passing a resolution for voluntary winding up, or an order is made for the compulsory winding up of the Company.
- (g) **Cashless Exercise Facility:** In lieu of paying the aggregate Exercise Price to purchase Shares, a Participant may elect to set-off the Option Exercise Price against the number of Shares which the Participant is entitled to receive upon exercise of the Participant's Options. By using the Cashless Exercise Facility, the Participant will receive Shares to the value of the surplus after the Option Exercise Price has been set-off.
- (h) **Lapse of an Award:** An Award will lapse upon the earlier to occur of:
- (i) an unauthorised dealing, or hedging of, the Award occurring;
- (ii) a Vesting Condition in relation to the Award is not satisfied by its due date, or becomes incapable of satisfaction, as determined by the Board in its absolute discretion, unless the Board exercises its discretion to waive the Vesting Condition and vest the Award;
- (iii) in respect of unvested Awards only, an Eligible Participant ceases to be an Eligible Participant, unless the Board exercises its discretion to vest the Award in the circumstances set out in paragraph (f) or the Board resolves, in its absolute discretion, to allow the unvested Awards to remain unvested after the Relevant Person ceases to be an Eligible Participant;
- (iv) in respect of vested Awards only, a relevant person ceases to be an Eligible Participant and the Award granted in respect of that person is not exercised within a one (1) month period (or such later date as the Board determines) of the date that person ceases to be an Eligible Participant;
- (v) the Board deems that an Award lapses due to fraud, dishonesty or other improper behaviour of the Eligible Participant;
- (vi) the Company undergoes a change of control or a winding up resolution or order is made and the Board does not exercise its discretion to vest the Award;
- (vii) the expiry date of the Award.
- (i) **Shares:** Shares resulting from the exercise of the Awards shall, subject to any Sale Restrictions (refer paragraph (j)) from the date of issue, rank on equal terms with all other Shares on issue.
- (j) **Sale Restrictions:** The Board may, in its discretion, determine at any time up until exercise of Awards, that a restriction period will apply to some or all of the Shares issued to an Eligible Participant (or their eligible nominee) on exercise of those Awards up to a maximum of five (5) years from the grant date of the Awards. In addition, the Board may, in its sole discretion, having regard to the circumstances at the time, waive any such restriction period determined.
- (k) **No Participation Rights:** There are no participating rights or entitlements inherent in the Awards and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Awards.
- (l) **Change in exercise price of number of underlying securities:** Unless specified in the offer of the Awards and subject to compliance with the ASX Listing Rules, an Award does not confer the right to a change in exercise price or in the number of underlying Shares over which the Award can be exercised.
- (m) **Reorganisation:** If, at any time, the issued capital of the Company is reorganised (including consolidation, subdivision, reduction or return), all rights of a holder of an Award are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reorganisation.

- (n) **Trust:** The Board may, at any time, establish a trust for the sole purpose of acquiring and holding Shares in respect of which a Participant may exercise, or has exercised, vested Awards, including for the purpose of enforcing the disposal restrictions and appoint a trustee to act as trustee of the trust. The trustee will hold the Shares as trustee for and on behalf of a Participant as beneficial owner upon the terms of the trust. The Board may at any time amend all or any of the provisions of the Plan to effect the establishment of such a trust and the appointment of such a trustee.

Schedule 4 Summary of New Constitution

The key terms of the New Constitution are as follows:

(a) Shares

The issue of Shares and Options by the Company is under the control of the Directors, subject to the Corporations Act, Listing Rules and any rights attached to any special class of Shares.

(b) Preference Shares

The Corporations Act requires certain rights of preference shares to be either set out in the constitution or approved in general meeting by special resolution before preference shares are issued.

The New Constitution sets out a framework of rights for preference share issues from which the Board can determine to issue preference shares, without the need to obtain further Shareholder approval every time an allotment of preference shares is proposed. Clause 5 to the New Constitution contains the framework as well as specific rights of preference shares as to the voting rights and priority of payment of capital and dividends.

(c) Reduction of Capital

The New Constitution is consistent with the Corporations Act requirements which must be satisfied by the Company in undertaking an alteration of capital.

(d) Liens

The Company will have a paramount lien and charge for unpaid calls and unpaid instalments, amounts owed for acquiring Shares under an employee incentive scheme, and amounts required by law to be paid that have been paid in respect of the Shares of a holder or a deceased former holder. The Company is entitled to take all reasonable steps necessary to protect its rights to any lien.

(e) Transfer of Shares

The Company may participate in any clearing and settlement facility provided under the Corporations Act, the Listing Rules and the ASX Settlement & Transfer Corporation Pty Ltd (ASTC) Operating Rules.

Where securities in the Company are transferred via an ASTC-regulated transfer, they may be done so in any manner required or permitted by the Listing Rules or the ASTC Settlement Rules.

(f) Takeover Approval

A takeover bid arises where there is an offer to buy a majority proportion of shareholder's shares. A proportional takeover bid is one in which the offer or offers only to buy a specified proportion of each Shareholders' shares.

The New Constitution provides for Shareholder approval of any proportional takeover bid for the shares. Subject to the Listing Rules and ASTC Operating Rules, the provisions require the Directors to refuse to register any transfer of shares made in acceptance of a proportional takeover offer until the requisite Shareholder approval has been obtained.

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. The proportional takeover 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.

(g) Alterations in share capital

The New Constitution provides that the Company may from time to time by ordinary resolution determine to increase, consolidate, or subdivide its Share capital, or cancel Shares and diminish the amount of its Share Capital by the amount of Shares so cancelled.

Similarly, the Company may reduce its Share Capital in accordance with the Corporations Act in any manner.

(h) Buy-back arrangements

The New Constitution provides that the Company may buy Securities in itself from time to time and is entitled to give financial assistance to any entity for the same. Any such buy-back must be consistent with the Corporations Act and the Listing Rules.

(i) Marketable parcels

The New Constitution contains provisions enabling the Company to procure the disposal of Shares where the Shareholder holds less than a marketable parcel of shares within the meaning of the Listing Rules (being a parcel of shares with a market value of less than \$500). To invoke this procedure, the Directors must first give notice to the relevant Shareholder holding less than a marketable parcel of shares, who may then elect not to have his or her shares sold by notifying the Directors.

(j) Variation of rights

Class rights attaching to a particular class of shares may be varied or cancelled with the consent in writing of holders of 75% of the shares in that class or by a special resolution of the holders of shares in that class.

(k) Meetings of Shareholders

An annual general meeting of the Company must be held in accordance with the Corporations Act. A meeting of the Company may be convened by the directors on the requisition of a majority of directors, on the requisition of such other person as shall be entitled to requisition such Meeting under the law, or on the Board so resolving.

No business shall be transacted at any Meeting unless a quorum of three Members is present at the time when the meeting proceeds to business. The New Constitution also prescribes that the Company may hold a Meeting at two or more venues in Australia or at such other place as may be determined by the Directors using any form of technology which gives the Members a reasonable opportunity to participate

The Company will hold annual general meetings in accordance with the Corporations Act and the Listing Rules.

(l) Voting rights of Members

Every Member present in person or by proxy shall be entitled to one vote on a show of hands, and to one vote for each Share of which the Member is the holder. A Member holding Shares in respect of which all sums due and payable to the Company have not been Paid is only entitled to attend Meetings and vote in respect of Shares held in respect of which no sums are due and payable to the Company

(m) Proxies

Any person entitled to attend and vote at any Meeting of the Company may appoint any proxy to attend and vote at the Meeting on the Member's behalf. The New Constitution contains provisions specifying the manner of lodgement of proxy instruments and the form of the proxy instrument.

(n) Directors

Unless changed by the Company in general meeting, the minimum number of directors is three and can be no more than nine.

The Directors and the Company may at any time appoint any natural person as a Director. Any such Director must retire at the next following annual general meeting of the Company (at which meeting he or she may be eligible for

re-election as director). At each annual general meeting of the Company, one-third of the Directors must retire from office.

(o) Power of Directors

The Directors shall manage and control the business and affairs of the Company.

(p) Remuneration of Directors

The remuneration of the executive directors shall be determined by the Board and must not include a commission on or percentage of operating revenue. The remuneration of non-executive directors must be a fixed sum.

The total amount of Director's fees payable by the Company must be set by resolution of the Company, and may only be increased by resolution of the Company with the notice of Meeting relating to any proposed increase specifying the amount of the proposed increase and the maximum sum that may be paid.

(q) Execution of documents

The New Constitution provides that the Company may execute any agreement, deed, share certificate or other document in any manner permitted by law including with or without the use of a common seal.

Every document which is executed shall be signed by either two directors, a director and the secretary, or a director and another authorised signatory appointed for that purpose by the Directors.

(r) Dividends

The New Constitution provides that the Directors shall be entitled to distribute the Equity of the Company by way of Dividend and payment of Dividends on the Shares shall be in proportion to the amounts Paid up on such Shares respectively at the date of declaration of the Dividend.

The Directors may from time to time declare and pay to the Members such final Dividends as appear to the Directors to be justified by the Equity of the Company, and a declaration by the Directors as to the amount of Equity available for Dividend shall be conclusive and binding on all Members of the Company.

(s) Indemnities and insurance

To the extent permitted by law, the Company indemnifies every person who is or has been a Director or Secretary of the Company against a liability incurred by that person in his or her capacity as a Director or secretary. A similar indemnity is provided in respect of legal proceedings. The Company may also pay the premiums on directors' and officers' liability insurance.

Schedule 5 Indonesian Legal Opinion

Law Firm



SHOLEH, ADNAN & ASSOCIATES
Advocates and Counselors at Law

South Pacific Resources Limited
Level 5, 56 Pitt Street Sydney
NSW 2000

July 31st, 2019

Dears Sirs

LEGAL OPINION DULY GIVEN FOR A REPORT ON MINEARAL CONCESSION (IUP OP16/DPE/IX/2010) AND ENFORCEABILITY OF RELATED EXCLUSIVE OPERATION AND MANAGEMENT AGREEMENT FOR SOUTH PACIFIC RESOURCES LIMITED (**TO BE RENAMED PYX RESOURCES LIMITED**) (the "COMPANY")

1. INTRODUCTION

On 3 September 2010, the Mining Business Operating Production License (IUP-OP 545/244/KPTS/VII/2012) was issued by Gunung Mas Regent of the Republic of Indonesia to PT Investasi Mandiri (company registration number: 02.037624).

On 24 January 2019, an exclusive Operation and Management Agreement was signed between PT Andary Usaha Makmur (company registration number: 8120103901691), a 99% owned subsidiary of Takmur Pte (a company incorporated in Singapore with company number 2018219911Z), and PT Investasi Mandiri. Under this agreement:

- PT Andary Usaha Makmur has committed to invest up to US\$ 15 million in the business of the PT Investasi Mandiri over a period of 10 years;
- PT Andary Usaha Makmur has the right to nominate the majority of PT Investasi Mandiri board members;
- PT Andary Usaha Makmur will have the right to receive 95% of the net profit of PT Investasi Mandiri on an annual basis; and
- The Operation and Management Agreement can be terminated only with the agreement of both parties

We have been asked and therefore provide to you our legal opinion duly given on the Mining Business Operating Production License (IUP-OP 16/DPE/IX/2010) issued by Gunung Mas Regent of the REPUBLIC OF INDONESIA and on the Exclusive Operation and Management Agreement executed between IUP-OP holder PT Investasi Mandiri and PT Andary Usaha Makmur.

We understand that this opinion is to be included in a prospectus and shareholder approval documentation issued by the Company for lodgement with the Australian Securities and Investments Commission and consent to the inclusion of this opinion in that document.

Bidakara 1, Lantai 1, Unit 010, Komplek Bidakara
Jl. Jend Gatot Subroto Kav 71-73, Pancoran, Jakarta 12870
Phone: (021-83787592), Email : info@saalaw.id

2. LICENCE

We have reviewed the documentation relevant to the IUP-OP and set out a summary below:

2.1. LICENSE NUMBER

IUP-OP No 16/DPE/IX/2010 .

A mining company in Indonesia obtains Mining Business Licence (the IUP) in two phases of mining activities. The exploration phase within the mining area to which the regency government will issue the Mining Business Licence (Izin Usaha Pertambangan) in the Mining Area or known as the IUP. The second phase is the Operation Production, which is granted by the regional government in Indonesia for performing construction, mining, processing, refining, and selling within the Commercial Mining business area, this licence is known to be referred to as IUP-OP.

2.2. REGISTERED OWNER

The registered owner of IUP-OP 16/DPE/IX/2010 is PT. INVESTASI MANDIRI

2.3. ISSUED

by Bupati (Regent) of a Regency Government Nama Gunung Mas, in Kalimantan Tengah (central Kalimantan), Indonesia.

2.4. STATE

Republic of Indonesia

2.5. GRANTED/EXPIRY

IUP-OP 16/DPE/IX/2010: granted on 2010 for an initial period of 10 years and expire on or before 31 December 2020

For the purpose of the renewal of the license, a submission will need to be made based on Law number 23/2014 to the same licensing authority which issued the license. There are 5 criteria to be evaluated for the purpose of license renewal: (i) administrative, (ii) geographic criteria, (iii) technical criteria, (iv) environmental criteria and (v) financial criteria.

2.6. MINERAL

For the right of mining, production and export of Zircon from Indonesia.

3. QUALIFICATIONS AND ABILITY TO GIVE STATEMENT

I am a solicitor licensed to practice law throughout Indonesia under license number 99.10639- PERADI. I am, Wirawan Adnan, the Managing Partner of the Indonesian law firm, SHOLEH, ADNAN & ASSOCIATES (SAA) acting on behalf SAA. We have been practicing Law and providing professional legal services to Indonesia clients as well as foreign clients in Indonesia since 1999 until now.

4. ASSUMPTIONS AND QUALIFICATIONS

Outside of the statements we make in our opinion here, we have assumed that the documents we have reviewed have not been fraudulently created and we make the statement that our opinion is only extended to matters which relate to the laws of the REPUBLIC OF INDONESIA.

5. OTHER

Our opinions are limited to the documents which are presented to us and to the laws of the Republic of Indonesia.

6. REPORTING OBLIGATIONS

No reporting obligations exists to Regency Government name Gunung Mas prior to the date of renewal.

7. OUR DUE AND HEREBY GIVEN OPINION

Based on the forgoing, we are of the opinion set out below:

- a) Indonesia is divided into provinces. Provinces are made up of regencies. A regency is headed by a regent (Bupati), and a city is headed by a mayor (Wali kota). Gunung Mas is a regency in the province of Central Kalimantan, Indonesia. Under the Indonesian Mining Law, the Central Government of the Republic of Indonesia determines the allowable mining areas for which the regencies are then delegated with authority from the central government to grant mining business licences within these pre-determined areas.
- b) We are of the view that the Mining Business License IUP-OP 16/DPE/IX/2010 has been duly and validly granted to PT Investasi Mandiri by the Regent of Gunung Mas, the competent authority of Republic of Indonesia. The Mining Business License IUP-OP 16/DPE/IX/2010 has obtained the Clean and Clear (CnC) Certificate and continues in force and effect. PT Investasi Mandiri is the legal and beneficial owner of this license which is free from any mortgage, charge, pledge, lien, assignment, hypothecation, security interest, title retention on it.
- c) We are of view that the Operation and Management Agreement entered into by and among PT Investasi Mandiri, PT Andary Usaha Makmur and existing shareholders of PT Investasi Mandiri on 24 January 2019 (the "Operation & Management Agreement") is fully valid and enforceable under the laws of Indonesia.
- d) PT Investasi Mandiri has been duly incorporated and is validly existing as a company with limited liability under the corporations laws of Indonesia and has obtained all relevant and necessary governmental authorizations in connection with the establishment and maintenance of the legal person status as required by the laws of Indonesia. Such governmental authorizations remain in full force and effect on the date hereof. We are not aware of any reason or matter that would cause any of such governmental authorizations to be revoked, suspended, cancelled or withdrawn or (where relevant) not to be renewed upon its expiration date.
- e) PT Investasi Mandiri has the right to explore for, extract, produce and remove zircon from the area covered by the IUP-OP.
- f) We confirm that there is no adverse effect on any of the above which would result from a change of control of PT Investasi Mandiri.

g) We have conducted litigation searches on PT Investasi Mandiri and have found that there are no records of any litigation or other proceedings in relation to PT Investasi Mandiri or in relation to the Operation and Management Agreement.

Summary of License Terms

Licence ID	IUP-OP No 16/DPE/IX/2010		
Granted by	Regency Government Name Gunung Mas		
Mineral	Zircon		
Permit Holder	PT Investasi Mandiri		
Area	2,035 ha		
Grant Date	3-Sep-2010		
Renewal Date	31-Dec-2020		
Rents, Rates and/or Taxes	2019: IDR 162.2 MM	2020: IDR 162.2 MM	2021: IDR 162.2 MM
Minimum Expenditure	2019: Nil	2020: Nil	2021: Nil
Security Deposit	2019: Nil	2020: Nil	2021: Nil

Authorized Signature



Wirawan Adnan

Schedule 6 Financials of Takmur Pte Ltd and Controlled Entities

Takmur Pte Limited and its Controlled Entities Interim Financial Report

DIRECTORS' REPORT

Your directors submit the financial report of the consolidated group for the half-year ended 30 June 2019.

Directors

The names of directors who held office during or since the end of the half-year:

Meity Erawaty Ewa

Yanti Kurnia Waty Binte Sapari (resigned on 26 August 2019)

Ong Chuan Heng (appointed on 26 August 2019)

Principal Activities

The principal activity of the consolidated group during the financial half-year was the holder of a mining concession related to a mineral sands deposit located in the Central Kalimantan Province of Indonesia, with an area of 2,032 hectares. In conjunction with this, the group operated a processing plant equipped to produce premium Zircon (65.5 grade).

In the previous half-year, the group only comprised Takmur Pte Ltd (a company incorporated on 28 June 2018 which didn't engage in any trading since its inception).

Dividends

There were no dividends paid, recommended or declared during the current or previous financial half-year.

Review of Operations

The profit for the group for the half-year ended 30 June 2019 after providing for income tax amounted to USD \$238,839. During the prior year, the Group only comprised Takmur Pte Ltd (a company incorporated on 28 June 2018 which didn't engage in any trading since its inception).

Effective 10 January 2019, Takmur Pte Ltd acquired a 99% interest in PT Andary Usaha Makmur for nil consideration. Effective 24 January 2019, PT Andary Usaha Makmur obtained control over PT Investasi Mandiri through an exclusive operation and management agreement. Both of these transactions resulted in business combinations during the half-year ended 30 June 2019.

Significant Changes in the State of Affairs

There were no significant changes in the state of affairs of the consolidated entity during the financial half-year, except for the PT Andary Usaha Makmur and PT Investasi Mandiri business combinations. Refer to 'Review of Operations' section for further details.

New Accounting Standards Implemented

IFRS 16 Leases

The Group has implemented a new accounting standard which has come into effect and is included in the results. IFRS 16: *Leases* has been applied retrospectively without restatement of comparatives by recognising the cumulative effect of initially applying IFRS 16 as an adjustment to the opening balance of equity at 1 January 2019. The cumulative effect of initially applying the Standard was nil, so no adjustments were required to net profit or opening retained earnings on transition.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

DIRECTORS' REPORT

Matters Subsequent to the End of the Financial Half-Year

No matters or circumstances has arisen since 30 June 2019 that has significantly affected, or may significantly affect the consolidated entity's operations, the results of those operations, or the consolidated entity's state of affairs in future financial years.

This directors' report is signed in accordance with a resolution of the Board of Directors.



Director

Meity Erawati Ewa

Dated this 3rd day of October 2019

Takmur Pte Limited and Controlled Entities

Interim Financial Report

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE HALF-YEAR ENDED 30 JUNE 2019

	Note	Consolidated Group	
		Half-year Ended 30 June 2019	Half-year Ended 30 June 2018
		USD \$	USD \$
Revenue		2,903,161	-
Cost of sales		(2,076,133)	-
Gross Profit		827,028	-
Interest income		5,456	-
Other revenue		39,200	-
Employee benefits expense		(42,313)	-
Depreciation and amortisation expense		(32,056)	-
Finance costs		(5,301)	-
Consulting and professional expenses		(198,596)	-
Other expenses		(212,726)	-
Compliance costs		(30,650)	-
Repairs and maintenance expenses		(26,939)	-
Profit before income tax		323,103	-
Income tax expense		(84,264)	-
Profit for the period		238,839	-
Other comprehensive income for the half-year		2,636	-
Total comprehensive income for the half-year		241,475	-
Net profit after tax attributable to:			
– owners of the parent entity		236,304	-
– non-controlling interest		2,535	-
		238,839	-
Total comprehensive income attributable to:			
– owners of the parent entity		238,940	-
– non-controlling interest		2,535	-
		241,475	-

The accompanying notes form part of these financial statements.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2019

	Note	Consolidated Group	
		As at 30 June 2019	As at 31 December 2018
		USD \$	USD \$
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents		210,750	-
Trade and other receivables		202,718	-
Inventories		472,202	-
Other assets		120,594	-
TOTAL CURRENT ASSETS		1,006,264	-
NON-CURRENT ASSETS			
Trade and other receivables		201,000	-
Property, plant and equipment		681,584	-
Intangible assets		7,774	-
TOTAL NON-CURRENT ASSETS		890,358	-
TOTAL ASSETS		1,896,622	-
LIABILITIES			
CURRENT LIABILITIES			
Trade and other payables		600,874	4,375
Lease liabilities		43,594	-
Current tax liabilities		212,826	-
TOTAL CURRENT LIABILITIES		857,294	4,375
NON-CURRENT LIABILITIES			
Lease liabilities		42,557	-
TOTAL NON-CURRENT LIABILITIES		42,557	-
TOTAL LIABILITIES		899,851	4,375
NET ASSETS / (LIABILITIES)		996,771	(4,375)
EQUITY			
Issued capital		1,178	734
Reserves		2,636	-
Retained earnings		231,195	(5,109)
Equity attributable to owners of the Parent Entity		235,009	(4,375)
Non-controlling interest		761,762	-
TOTAL EQUITY		996,771	(4,375)

The accompanying notes form part of these financial statements.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

Note	Ordinary Share Capital USD \$	Retained Earnings USD \$	Foreign Exchange Reserve USD \$	Non- controlling Interests USD \$	Total USD \$
Balance at 1 January 2018	-	-	-	-	-
Transactions with owners, in their capacity as owners, and other transfers					
Shares issued during the period	734	-	-	-	734
Total transactions with owners and other transfers	734	-	-	-	734
Balance at 30 June 2018	734	-	-	-	734
Balance at 1 January 2019	734	(5,109)	-	-	(4,375)
Comprehensive income					
Profit for the period	-	236,304	-	2,535	238,839
Other comprehensive income for the period	-	-	2,636	-	2,636
Total comprehensive income for the period	-	236,304	2,636	2,535	241,475
Transactions with owners, in their capacity as owners, and other transfers					
Shares issued during the period	444	-	-	-	444
Non-controlling interests on acquisitions	-	-	-	759,227	759,227
Total transactions with owners and other transfers	444	-	-	759,227	759,671
Balance at 30 June 2019	1,178	231,195	2,636	761,762	996,771

The accompanying notes form part of these financial statements.

Takmur Pte Limited and Controlled Entities
Interim Financial Report

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE HALF-YEAR ENDED
30 JUNE 2019

	Notes	Consolidated Group	
		Half-year Ended	Half-year Ended
		30 June 2019	30 June 2018
		USD \$	USD \$
CASH FLOWS FROM OPERATING ACTIVITIES			
Receipts from customers		2,619,745	-
Payments to suppliers and employees		(2,309,723)	-
Interest received		5,456	-
Finance costs		(5,301)	-
Tax related expenses		(41,828)	-
Net cash (used in)/generated by operating activities		268,349	-
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of property, plant and equipment		(52,822)	-
Payments for acquisitions, net of cash acquired	4	17,468	-
Net cash (used in)/generated by investing activities		(35,354)	-
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from issue of shares		444	-
Repayments of lease liabilities		(22,689)	-
Net cash (used in)/generated by financing activities		(22,245)	-
Net increase/(decrease) in cash held		210,750	-
Cash and cash equivalents at beginning of period		-	-
Cash and cash equivalents at end of period		210,750	-

The accompanying notes form part of these financial statements.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE HALF-YEAR ENDED 30 JUNE 2019

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. **Basis of Preparation**

These general purpose interim financial statements for half-year reporting period ended 30 June 2019 have been prepared in accordance with requirements of the International Accounting Standards ("IFRSs"). The Group is a for-profit entity for financial reporting purposes under International Financial Reporting Standard.

This interim financial report is intended to provide users with an update on the latest annual financial statements of Takmur Pte Limited and its controlled entities (referred to as the "Consolidated Group" or "Group"). It is therefore recommended that this financial report be read in conjunction with the annual financial statements of the Group for the year ended 31 December 2018.

These interim financial statements were authorised for issue on 3 October 2019.

b. **Accounting Policies**

The same accounting policies and methods of computation have been followed in this interim financial report as were applied in the most recent annual financial statements.

The Group has considered the implications of new or amended Accounting Standards, but determined that their application to the financial statements is either not relevant or not material.

The same accounting policies and methods of computation have been followed in this interim financial report as were applied in the most recent annual financial statements, except for those as described in Note 1(c) below.

c. **New and Amended Standards Adopted by the Group**

The Group has considered the implications of new or amended Accounting Standards which have become applicable for the current financial reporting period. The Group had to change its accounting policies as a result of adopting the following Standard:

- IFRS 16: *Leases*

The impact of the adoption of this Standard and the respective accounting policies are disclosed in Note 2.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE HALF-YEAR ENDED 30 JUNE 2019

NOTE 2: CHANGES IN ACCOUNTING POLICIES

This note describes the nature and effect of the adoption of IFRS 16: *Leases* on the Group's financial statements and discloses the new accounting policies that have been applied from 1 January 2019, where they are different to those applied in prior periods.

Despite the changes in the Group's accounting policies, prior year financial statements were not required to be restated

a. Leases

The Group as lessee

At inception of a contract, the Group assesses if the contract contains or is a lease. If there is a lease present, a right-of-use asset and a corresponding lease liability are recognised by the Group where the Group is a lessee. However, all contracts that are classified as short-term leases (ie leases with a remaining term of 12 months or less) and leases of low value assets are recognised as operating expenses on a straight-line basis over the term of the lease.

Initially the lease liability is measured at the present value of the lease payments still to be paid at the commencement date. The lease payments are discounted at the interest rate implicit in the lease. If this rate cannot be readily determined, the Group uses the incremental borrowing rate.

Lease payments included in the measurement of the lease liability is as follows:

- fixed lease payments less any lease incentives;
- variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- the amount expected to be payable by the lessee under residual value guarantees;
- the exercise price of purchase options, if the lessee is reasonably certain to exercise the options; and
- payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, any lease payments made at or before the commencement day and any initial direct costs. The subsequent measurement of the right-of-use assets is at cost less accumulated depreciation and impairment losses.

Right-of-use assets are depreciated over the lease term or useful life of the underlying asset, whichever is the shortest.

Where a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Group anticipates to exercise a purchase option, the specific asset is depreciated over the useful life of the underlying asset.

b. Initial Application of IFRS 16: *Leases*

The Group has adopted IFRS 16: *Leases* retrospectively from 1 January 2019. In accordance with IFRS 16.C7 the comparatives for the 2018 reporting period have not been restated. On application it was determined that no adjustments were required given the inconsequential monetary impact of the group's existing operating leases.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE HALF-YEAR ENDED 30 JUNE 2019

NOTE 3: PROFIT FOR THE PERIOD

	Consolidated Group	
	Half-year Ended 30 June 2019	Half-year Ended 30 June 2018
	USD \$	USD \$
The following revenue and expense items are relevant in explaining the financial performance for the interim period:		
Revenues from overseas customers	2,455,911	-
Revenues from local customers	447,250	-
Purchase of raw materials	(1,646,099)	-

NOTE 4: BUSINESS COMBINATIONS

a) Acquisition of PT Andary Usaha Makmur

On 10 January 2019, the Group acquired 99% of the issued capital of PT Andary Usaha Makmur, a company that was engaged to be the exclusive operations manager of PT Investasi Mandiri (a company involved in the production and distribution of premium Zircon). The acquisition was for nil purchase consideration however Takmur Pte Ltd assumed the outstanding unpaid amount owing in relation to the issued capital in PT Andary Usaha Makmur.

Through acquiring 99% of the issued capital of PT Andary Usaha Makmur, the Group has obtained control of the company.

The purchase was satisfied by way of the company assuming the liability in relation to the issued capital of PT Andary Usaha Makmur which amounted to USD \$344,228.

	Fair Value USD \$
Purchase consideration:	
– Liabilities assumed	344,228
– NCI's proportionate share of fair value in net assets	3,399
	<u>347,627</u>
Less:	
Other receivables	344,228
Trade and other payables	(4,375)
Identifiable assets acquired and liabilities assumed	<u>339,853</u>
Goodwill	<u>7,774</u>

Nil profit and revenue resulting from the acquisition of PT Andary Usaha Makmur was included in the consolidated statement of profit or loss and other comprehensive income for the half-year ended 30 June 2019.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE HALF-YEAR ENDED 30 JUNE 2019

NOTE 4: BUSINESS COMBINATIONS

b) Acquisition of PT Investasi Mandiri

On 24 January 2019, the Group obtained control of PT Investasi Mandiri, a company that is the holder of a mining concession related to a mineral sands deposit located in the Central Kalimantan Province of Indonesia, with an area of 2,032 hectares. In conjunction with this, PT Investasi Mandiri operated a processing plant equipped to produce premium Zircon (65.5 grade). Control was obtained through the execution of an exclusive operations and management agreement between PT Andary Usaha Makmur and PT Investasi Mandiri and was for nil purchase consideration.

	Fair Value USD \$
Purchase consideration:	
– Consideration transferred	-
– NCI's proportionate share of fair value in net assets	755,829
	<u>755,829</u>
Less:	
Cash and cash equivalents	17,468
Trade and other receivables	81,103
Inventories	702,517
Property, plant and equipment	612,190
Trade and other payables	(426,847)
Borrowings	(60,212)
Current tax liabilities	(170,390)
Identifiable assets acquired and liabilities assumed	<u>755,829</u>
Goodwill	<u>-</u>

Profit and revenue resulting from the acquisition of PT Investasi Mandiri amounting to USD \$253,460 and USD \$2,903,161 respectively are included in the consolidated statement of profit or loss and other comprehensive income for the half-year ended 30 June 2019.

Had the results relating to PT Investasi Mandiri been consolidated from 1 January 2019, consolidated revenue of the Consolidated Group would have remained the same however the consolidated profit of the Consolidated Group would have been USD \$201,274 for the half-year ended 30 June 2019.

NOTE 5: CONTINGENT LIABILITIES

There has been no change in contingent liabilities since the last annual reporting period.

NOTE 6: EVENTS AFTER THE END OF THE INTERIM PERIOD

The directors are not aware of any significant events since the end of the interim period.

NOTE 7: FAIR VALUE MEASUREMENTS

The carrying amounts of trade and other receivables, trade and other payables and other financial liabilities approximate their fair values due to their short-term nature.

The fair value of financial liabilities is estimated by discounting the remaining contractual maturities at the current market interest rate that is available for similar financial liabilities.

Takmur Pte Limited and Controlled Entities

Interim Financial Report

DIRECTORS' DECLARATION

In accordance with a resolution of the directors of Takmur Pte Ltd, the directors of the Entity declare that:

1. The financial statements and notes, as set out on pages 3 to 10, are:
 - a. complying with International Accounting Standard 34: *Interim Financial Reporting*; and
 - b. giving a true and fair view of the Consolidated Group's financial position as at 30 June 2019 and of its performance for the half-year ended on that date.
2. In the directors' opinion there are reasonable grounds to believe that the Entity will be able to pay its debts as and when they become due and payable.

Director

Meity Erawati Ewa

Dated this 3rd day of October 2019



**TAKMUR PTE LTD AND ITS CONTROLLED ENTITIES
INDEPENDENT AUDITOR'S REVIEW REPORT TO THE MEMBERS OF
TAKMUR PTE LTD AND ITS CONTROLLED ENTITIES**

SYDNEY

Level 40
2 Park Street
Sydney NSW 2000
Australia
Ph: (612) 9263 2600
Fx: (612) 9263 2800

Report on the Half-Year Financial Report

We have reviewed the accompanying half-year financial report of Takmur Pte Ltd and its controlled entities (the Group), which comprises the consolidated statement of financial position as at 30 June 2019, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the half-year ended on that date, notes to the financial statements including a summary of significant accounting policies, other explanatory information, and the directors' declaration.

Directors' Responsibility for the Half-Year Financial Report

The directors of Takmur Pte Ltd are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with International Financial Reporting Standards and for such internal control as the directors determine is necessary to enable the preparation of the half-year financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express a conclusion on the half-year financial report based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2410: *Review of a Financial Report Performed by the Independent Auditor of the Entity*, in order to state whether, on the basis of the procedures described, we have become aware of any matter that makes us believe that the half-year financial report does not give a true and fair view of the Group's financial position as at 30 June 2019 and its performance for the half-year ended on that date; and complying with International Accounting Standard IAS 34: *Interim Financial Reporting*. As the auditor of the Group, ASRE 2410 requires that we comply with the ethical requirements relevant to the audit of the annual financial report.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the half-year financial report of Takmur Pte Ltd and its controlled entities is not:

- (i) giving a true and fair view of the Group's financial position as at 30 June 2019 and of its performance for the half-year ended on that date; and
- (ii) complying with International Accounting Standard IAS 34: *Interim Financial Reporting*.



HALL CHADWICK
Level 40, 2 Park Street
Sydney NSW 2000



Drew Townsend
Partner
Dated: 3 October 2019

A Member of PrimeGlobal
An Association of Independent
Accounting Firms

 PrimeGlobal

For personal use only


ONLINE PROXY APPOINTMENT
www.advancedshare.com.au/investor-login

MOBILE DEVICE PROXY APPOINTMENT

Lodge your proxy by scanning the QR code below, and enter your registered postcode.
 It is a fast, convenient and a secure way to lodge your vote.

2019 GENERAL MEETING PROXY FORM

I/We being shareholder(s) of South Pacific Resources Limited and entitled to attend and vote hereby:

APPOINT A PROXY


The Chairman of
the meeting

OR



PLEASE NOTE: If you leave the section blank,
the Chairman of the Meeting will be your proxy.

or failing the individual(s) or body corporate(s) named, or if no individual(s) or body corporate(s) are named, the Chairman of the Meeting, as my/our proxy to act generally at the meeting 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 law, as the proxy sees fit), at the General Meeting of the Company to be held at **Level 5, 56 Pitt Street, Sydney, NSW, 2000, Australia on 13 December 2019 at 11.00 am (AEDT)** and at any adjournment or postponement of that Meeting.

CHAIRMAN'S VOTING INTENTION IN RELATION TO UNDIRECTED PROXIES:

The Chairman intends to vote undirected proxies in favour of all Resolutions. In exceptional circumstances the Chairman may change his/her voting intention on any Resolution. In the event this occurs an ASX announcement will be made immediately disclosing the reasons for the change.

VOTING DIRECTIONS
Resolutions

- 1 Disposal of Main Undertaking
- 2 Approval of Change to Nature and Scale of Activities
- 3 Consolidation of Capital
- 4 Approval of Issue of Acquisition Shares
- 5 Approval of Public Offer
- 6 Change of Name to Pyx Resources Limited
- 7 Election of Mr. Oliver Hasler as a Director
- 8 Election of Mr. Bakhos Georges as a Director
- 9 Election of Mr. Gary J. Artmont as a Director
- 10 Approval to Set Directors' Fees
- 11 Approval of Stock Incentive Plan
- 12 Issue of Performance Rights and Shares to Mr. Oliver Hasler
- 13 Repeal and replacement of Company's Constitution

For Against Abstain*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



* If you mark the Abstain box for a particular Resolution, 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.

SIGNATURE OF SHAREHOLDERS – THIS MUST BE COMPLETED

Shareholder 1 (Individual)

Joint Shareholder 2 (Individual)

Joint Shareholder 3 (Individual)

Sole Director and Sole Company Secretary

Director/Company Secretary (Delete one)

Director

This form should be signed by the shareholder. If a joint holding, all the shareholder should sign. If signed by the shareholder'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).

Email Address



Please tick here to agree to receive communications sent by the company via email. This may include meeting notifications, dividend remittance, and selected announcements.

HOW TO COMPLETE THIS SHAREHOLDER PROXY FORM

**IF YOU WOULD LIKE TO ATTEND AND VOTE AT THE MEETING, PLEASE BRING THIS FORM WITH YOU.
THIS WILL ASSIST IN REGISTERING YOUR ATTENDANCE.**

CHANGE OF ADDRESS

This form shows your address as it appears on Company's share register. If this information is incorrect, please make the correction on the form. Shareholders sponsored by a broker should advise their broker of any changes.

APPOINTMENT OF A PROXY

If you wish to appoint the Chairman as your proxy, mark the box in Step 1. If you wish to appoint someone other than the Chairman, please write that person's name in the box in Step 1. A proxy need not be a shareholder of the Company. A proxy may be an individual or a body corporate.

DEFAULT TO THE CHAIRMAN OF THE MEETING

If you leave Step 1 blank, or if your appointed proxy does not attend the Meeting, then the proxy appointment will automatically default to the Chairman of the Meeting.

VOTING DIRECTIONS – PROXY APPOINTMENT

You may direct your proxy on how to vote by placing a mark in one of the boxes opposite each resolution of business. All your shares will be voted in accordance with such a direction unless you indicate only a portion of voting rights are to be voted on any resolution by inserting the percentage or number of shares you wish to vote in the appropriate box or boxes. If you do not mark any of the boxes on a given resolution, your proxy may vote as they choose to the extent they are permitted by law. If you mark more than one box on a resolution, your vote on that resolution will be invalid.

PLEASE NOTE: If you appoint the Chairman as your proxy (or if he is appointed by default) but do not direct him how to vote on a resolution (that is, you do not complete any of the boxes "For", "Against" or "Abstain" opposite that resolution), the Chairman may vote as he sees fit on that resolution.

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 Advanced Share Registry Limited or you may copy this form and return them both together.

To appoint a second proxy you must:

- On each Proxy Form state the percentage of your voting rights or number of shares 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
- Return both forms together.

CORPORATE REPRESENTATIVES

If a representative of a nominated corporation is to attend the meeting the appropriate "Certificate of Appointment of Corporate Representative" should be produced prior to admission in accordance with the Notice of Meeting. A Corporate Representative Form may be obtained from Advanced Share Registry.

SIGNING INSTRUCTIONS ON THE PROXY FORM

Individual:

Where the holding is in one name, the security holder must sign.

Joint Holding:

Where the holding is in more than one name, all of the security holders should sign.

Power of Attorney:

If you have not already lodged the Power of Attorney with Advanced Share Registry, please attach the original or 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 sign alone. Otherwise this form must be signed by a Director jointly with either another Director or a Company Secretary. Please sign in the appropriate place to indicate the office held.

LODGE YOUR PROXY FORM

This Proxy Form (and any power of attorney under which it is signed) must be received at an address given below by 11.00 am (AEDT) on 11 December 2019, being not later than 48 hours before the commencement of the Meeting. Proxy Forms received after that time will not be valid for the scheduled meeting.



ONLINE PROXY APPOINTMENT

www.advancedshare.com.au/investor-login



BY MAIL

Advanced Share Registry Limited
110 Stirling Hwy, Nedlands WA 6009; or
PO Box 1156, Nedlands WA 6909



BY FAX

+61 8 9262 3723



BY EMAIL

admin@advancedshare.com.au



IN PERSON

Advanced Share Registry Limited
110 Stirling Hwy, Nedlands WA 6009



ALL ENQUIRIES TO

Telephone: +61 8 9389 8033