CIRCULAR DATED 28 JUNE 2018

THIS CIRCULAR IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION. PLEASE READ IT CAREFULLY.

If you are in any doubt in relation to the contents of this Circular or as to the action you should take, you should consult your bank manager, stockbroker, solicitor, accountant, tax adviser or other professional adviser immediately.

If you have sold or transferred all your shares in the capital of Golden Energy and Resources Limited (the "**Company**"), you should immediately forward this Circular, the Notice of EGM and the attached Proxy Form (all as defined herein) to the purchaser or transferee or to the bank, stockbroker or other agent through whom the sale or transfer was effected for onward transmission to the purchaser or transferee.

The Singapore Exchange Securities Trading Limited (the "**SGX-ST**") assumes no responsibility for the accuracy of any of the statements made, reports contained or opinions expressed in this Circular.

golden energy and resources

GOLDEN ENERGY AND RESOURCES LIMITED

(Incorporated in the Republic of Singapore)
(Company Registration No. 199508589E)

CIRCULAR TO SHAREHOLDERS

in relation to

THE PROPOSED ACQUISITION AS AN INTERESTED PERSON TRANSACTION, COMPRISING:

(1) THE PROPOSED ACQUISITION OF 100% SHAREHOLDING INTEREST IN PT BARASENTOSA LESTARI, PT UNSOCO, PT DUTA SARANA INTERNUSA AND PT DWIKARYA SEJATI UTAMA; AND

(2) THE PROPOSED ACQUISITION OF US$6,368,158 MANDATORY CONVERTIBLE BONDS.

Independent Financial Adviser to the Directors
in relation to the Proposed Acquisition (as defined herein)
as an Interested Person Transaction

ZICO | capital

ZICO CAPITAL PTE. LTD.
(Company Registration No. 201613589E)
(Incorporated in the Republic of Singapore)

IMPORTANT DATES AND TIMES:

Last date and time for lodgement of Proxy Form	:	10 July 2018 at 10.00 a.m.
Date and time of Extraordinary General Meeting	:	13 July 2018 at 10.00 a.m.
Place of Extraordinary General Meeting	:	Guild Room, NUSS The Graduate Club Suntec City Guild House 3 Temasek Boulevard (Tower 5) #02-401/402 Suntec City Mall Singapore 038983

TABLE OF CONTENTS

SECTION		PAGE NO
DEFINITIONS		3
CAUTIONARY NOTE ON FORWARD LOOKING STATEMENTS		10
LETTER TO SHAREHOLDERS		11
1.	INTRODUCTION	11
2.	INFORMATION ON THE TARGET COMPANIES	12
3.	THE GMR VENDORS AND THE RELATIONSHIP WITH GEMS AND THE COMPANY	14
4.	THE PROPOSED ACQUISITION	15
5.	THE MANDATORY CONVERTIBLE BONDS	26
6.	VALUATION	28
7.	FINANCIAL EFFECTS OF THE PROPOSED ACQUISITION	29
8.	LISTING MANUAL COMPUTATIONS (RELATIVE FIGURES UNDER RULE 1006)	30
9.	THE PROPOSED ACQUISITION AS AN INTERESTED PERSON TRANSACTION	31
10.	INTEREST OF DIRECTORS AND SUBSTANTIAL SHAREHOLDERS	33
11.	OPINION OF THE INDEPENDENT FINANCIAL ADVISER	34
12.	STATEMENT FROM THE AUDIT COMMITTEE	34
13.	DIRECTORS' RECOMMENDATIONS	34
14.	EXTRAORDINARY GENERAL MEETING	34
15.	ACTION TO BE TAKEN BY THE SHAREHOLDERS	35
16.	ABSTENTION FROM VOTING	35
17.	CONSENTS	35
18.	DIRECTORS' RESPONSIBILITY STATEMENT	36
19.	GMR VENDORS DIRECTORS' RESPONSIBILITY STATEMENT	36
20.	DOCUMENTS AVAILABLE FOR INSPECTION	36
APPENDIX 1 – INFORMATION ON THE BSL COAL CONCESSION AREA		38
APPENDIX 2 – FINANCIAL HIGHLIGHTS OF THE TARGET GROUP		42
APPENDIX 3 – LETTER FROM THE INDEPENDENT FINANCIAL ADVISER		47
APPENDIX 4A – BSL INDEPENDENT QUALIFIED PERSON'S REPORT (SOUTH BLOCK)		68
APPENDIX 4B – BSL INDEPENDENT QUALIFIED PERSON'S REPORT (NORTH BLOCK)		320
NOTICE OF EXTRAORDINARY GENERAL MEETING		366
PROXY FORM		

In this Circular, the following definitions apply throughout unless the context otherwise requires or otherwise stated:

"**Act**" or "**Companies Act**"	:	The Companies Act (Chapter 50) of Singapore, as amended, supplemented or modified from time to time
"**Audit Committee**"	:	The audit committee of the Board of the Company as at the Latest Practicable Date, comprising Messrs Lim Yu Neng Paul, Lay Krisnan Cahya and Lew Syn Pau
"**Balance Amount**"	:	Has the meaning ascribed to it in Section 4.2.4(c) of this Circular
"**Board**"	:	The board of Directors of the Company as at the Latest Practicable Date
"**BSL**"	:	PT Barasentosa Lestari
"**BSL Shares**"	:	Has the meaning ascribed to it in Section 4.2.1(a) of this Circular
"**BSL Coal Concession Area**"	:	Has the meaning ascribed to it in paragraph 1 of Appendix 1 to this Circular
"**BSL Independent Qualified Person's Report (North Block)**"	:	The independent qualified person's report on the north block of the BSL Coal Concession Area conducted by Salva Mining in accordance with the VALMIN Code, with an effective date of 31 December 2017, as set out in Appendix 4B to this Circular
"**BSL Independent Qualified Person's Report (South Block)**"	:	The independent qualified person's report on the south block of the BSL Coal Concession Area conducted by Salva Mining in accordance with the VALMIN Code and the JORC Code, with an effective date of 31 December 2017, as set out in Appendix 4A to this Circular
"**BSL Independent Qualified Person's Reports**"	:	Collectively, the BSL Independent Qualified Person's Report (North Block) and the BSL Independent Qualified Person's Report (South Block)
"**Business Day**"	:	A day on which banks are open for business in Jakarta, Indonesia and India, excluding Saturdays, Sundays or public holidays in Jakarta, Indonesia and India
"**Consideration**"	:	US$65,638,158, being the aggregate consideration payable by GEMS to the GMR Vendors for the Proposed Acquisition, comprising the Sale Shares Consideration and the MCB Consideration, subject to the terms and conditions of the Sale and Purchase Agreement
"**CDP**"	:	The Central Depository (Pte) Limited
"**CEO**"	:	Chief Executive Officer

"**Circular**"	:	This circular to Shareholders dated 28 June 2018
"**Conditions Precedent**"	:	Has the meaning ascribed to it in Section 4.3 of this Circular
"**Company**"	:	Golden Energy and Resources Limited
"**Completion**"	:	The completion of the Proposed Acquisition in accordance with the Sale and Purchase Agreement
"**Completion Date**"	:	The date, being a Business Day, on which Completion actually takes place
"**Controlling Shareholder**"	:	A person who: (a) holds directly or indirectly 15% or more of the nominal amount of all voting shares in a company; or (b) in fact exercises control over a company
"**Directors**"	:	Directors of the Company as at the Latest Practicable Date, and a "**Director**" shall refer to each of such Directors
"**DSI**"	:	PT Duta Sarana Internusa
"**DSS**"	:	PT Dian Swastatika Sentosa Tbk
"**DSU**"	:	PT Dwikarya Sejati Utama
"**EGM**"	:	The extraordinary general meeting of the Company to be held at Guild Room, NUSS The Graduate Club, Suntec City Guild House, 3 Temasek Boulevard (Tower 5) #02-401/402, Suntec City Mall, Singapore 038983 at 10.00 a.m. on 13 July 2018 (or any adjournment thereof), for the purpose of seeking the Shareholders' approval for the Proposed Acquisition, notice of which is set out in the Notice of EGM
"**Encumbrance**"	:	Any claim, pledge, mortgage, power of sale, retention of title or security interest of any kind over and in respect of such asset; and any right of pre-emption, first offer, first refusal, tag-along or drag-along of any kind to which any such asset is subject or any right or option for the sale or purchase of any such asset
"**EPS**"	:	Earnings per share
"**GEMS**"	:	PT Golden Energy Mines Tbk, together with its subsidiaries, the "**GEMS Group**"
"**GMR**"	:	GMR Infrastructure Ltd, and together with its subsidiaries, the "**GMR Group**"
"**GMR Energy**"	:	GMR Energy (Netherlands) B.V.

"**GMR Infrastructure**"	:	GMR Infrastructure (Overseas) Limited
"**GMR Singapore**"	:	GMR Coal Resources Pte Ltd
"**GMR Vendor Shareholders' Approval**"	:	Has the meaning ascribed to it in Section 4.3(a) of this Circular
"**GMR Vendors**"	:	Collectively, GMR Energy and GMR Infrastructure
"**GMR Vendors Directors**"	:	The directors of the GMR Vendors as at the Latest Practicable Date, being: (a) in respect of GMR Energy, Zedra Management BV and Tummalapalli Srinivasa Subrahmanya Veerabhadra Lakshminarayana; and (b) in respect of GMR Infrastructure, Nousrath Bhugeloo, Devananda Naraidoo and Tummalapalli Srinivasa Subrahmanya Veerabhadra Lakshminarayana
"**Group**"	:	The Company and its subsidiaries, and the term "**Group Company**" shall be construed accordingly
"**IFA**" or "**ZICO Capital**"	:	ZICO Capital Pte. Ltd., the independent financial advisor to the Directors in relation to the Proposed Acquisition as an interested person transaction
"**IFA Letter**"	:	A copy of the letter dated 28 June 2018 from the IFA as set out in Appendix 3 to this Circular
"**JORC Code**"	:	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition)
"**KJPP JKR**"	:	Kantor Jasa Penilai Publik Jennywati, Kusnanto & rekan
"**Latest Practicable Date**"	:	19 June 2018, being the latest practicable date prior to the printing of this Circular
"**Listing Manual**"	:	The Listing Manual of the SGX-ST Mainboard, as amended, modified or supplemented from time to time
"**Long Stop Date**"	:	31 August 2018, or any other date as Parties may agree in writing
"**Mandatory Convertible Bonds**"	:	The mandatory convertible bonds (comprising the MCB Series A and MCB Series B) of aggregate face value of US$6,368,158 issued by DSU and held by the GMR Vendors
"**MCB Series A**"	:	The mandatory convertible bonds of aggregate face value of US$5,646,300 issued by DSU pursuant to the MCB Series A Issuance Agreement

"**MCB Series B**"	:	The mandatory convertible bonds of aggregate face value of US$721,858 issued by DSU pursuant to the MCB Series B Issuance Agreement
"**MCB Series A Issuance Agreement**"	:	The mandatory convertible bonds issuance agreement dated 10 April 2008 in respect of the issuance of mandatory convertible bonds by DSU, as amended, supplemented or otherwise modified
"**MCB Series B Issuance Agreement**"	:	The mandatory convertible bonds issuance agreement dated 25 November 2008 in respect of the issuance of mandatory convertible bonds by DSU, as amended, supplemented or otherwise modified
"**MCB Acquisition**"	:	The sale by the GMR Vendors, and the purchase by the GEMS Group, of the Mandatory Convertible Bonds, in accordance with the terms and conditions of the Sale and Purchase Agreement
"**MCB Consideration**"	:	US$6,368,158, being the aggregate consideration payable by the GEMS Group to the GMR Vendors for the MCB Acquisition, in accordance with the terms and conditions of the Sale and Purchase Agreement
"**Notice of EGM**"	:	The notice of EGM as set out in the section "Notice of Extraordinary General Meeting" in this Circular
"**NAV**"	:	Net asset value
"**NTA**"	:	Net tangible assets
"**NTL**"	:	Net tangible liabilities
"**Parties**"	:	The parties to the Sale and Purchase Agreement, being GEMS, GMR Infrastructure and GMR Energy, and "**Party**" shall refer to any one of such Parties
"**Proposed Acquisition**"	:	Collectively, the Sale Shares Acquisition and the MCB Acquisition, in accordance with the terms and conditions of the Sale and Purchase Agreement
"**Proxy Form**"	:	The proxy form in respect of the EGM as set out in the section "Proxy Form" in this Circular
"**Purchasers**"	:	Collectively, GEMS and PT GEMS Energy Indonesia (a 99.99%-owned subsidiary of GEMS), and "**Purchaser**" shall refer to any one of them
"**RTO**"	:	The Company's acquisition of 66.9998% of the issued and paid-up share capital of GEMS
"**RTO Circular**"	:	The Company's circular to shareholders dated 30 January 2015 in relation to the RTO

"**Sale Shares**"	:	Collectively, the following: (a) 175 shares in the issued share capital of BSL, representing 5% of the total issued and paid up share capital of BSL, owned by GMR Infrastructure; (b) 100,000 shares in the issued share capital of UNS, representing 100% of the total issued and paid up share capital of UNS, owned 99% by GMR Energy and 1% by GMR Infrastructure; (c) 10 shares in the issued share capital of DSI, representing 1% of the total issued and paid up share capital of DSI, owned by GMR Energy; and (d) 1,000 shares in the issued share capital of DSU, representing 100% of the total issued and paid up share capital of DSU, owned 99.9% by GMR Energy and 0.1% by GMR Infrastructure
"**Sale Shares Acquisition**"	:	The sale by the GMR Vendors, and the purchase by the GEMS Group, of the Sale Shares, in accordance with the terms and conditions of the Sale and Purchase Agreement
"**Sale Shares Consideration**"	:	US$59,270,000, being the aggregate consideration payable by the GEMS Group to the GMR Vendors for the Sale Shares Acquisition, in accordance with the terms and conditions of the Sale and Purchase Agreement
"**Salva Mining**"	:	Salva Mining Pty Ltd
"**Securities and Futures Act**"	:	The Securities and Futures Act, Chapter 289, of Singapore, as amended, supplemented or modified from time to time
"**Sale and Purchase Agreement**"	:	The conditional Sale and Purchase Agreement dated 12 May 2017 (as amended, supplemented or otherwise modified) entered into among GEMS and the GMR Vendors in respect of the Proposed Acquisition (comprising the Sale Shares Acquisition and MCB Acquisition)
"**SGX-ST**"	:	The Singapore Exchange Securities Trading Limited
"**Shares**"	:	The ordinary shares in the share capital of the Company
"**Shareholders**"	:	Registered holders for the time being of Shares except that where the registered holder is CDP, and the term "**Shareholders**" shall, in relation to such Shares and where the context admits, mean the Depositors who have Shares entered against their names in the Depository Register
"**Target Group**"	:	Collectively, BSL, UNS, DSI and DSU, and "**Target Group**

		Company" shall refer to any one of them
"**UNS**"	:	PT Unsoco
"**VALMIN Code**"	:	Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (2015 Edition), prepared by the VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Mineral Industry Consultants Association with the participation of the Australian Securities and Investment Commission, the Australian Stock Exchange Limited, the Minerals Council of Australia, the Petroleum Exploration Society of Australia, the Securities Institute of Australia and representatives from the Australian finance sector

Currencies and Units of Measurement

"**%**" or "**per cent.**"	:	Per centum or percentage
"**Rp**"	:	Indonesian Rupiah, the lawful currency of the Republic of Indonesia for the time being
"**S$**" **and** "**cents**"	:	Singapore Dollars and cents respectively, the lawful currency of the Republic of Singapore for the time being
"**US$**" **and** "**US cents**"	:	US Dollars and cents respectively, the lawful currency of the United States of America for the time being

Unless the context otherwise requires:

(i) the terms "**depositor**", "**depository register**" and "**depository agent**" shall have the meanings ascribed to them respectively in Section 81SF of the Securities and Futures Act and the terms "**subsidiary**", "**related company**" and "**substantial shareholder**" shall have the meanings ascribed to them in Sections 5, 6 and 81 of the Companies Act respectively;

(ii) the terms "**associate**" and "**associated company**" shall have the meanings ascribed to them in the Section entitled "Definitions and Interpretation" of the Listing Manual;

(iii) the terms "**entity-at-risk**" and "**interested person**" shall be persons falling within the scope of the definitions for the same set out in the Listing Manual;

(iv) words importing the singular shall, where applicable, include the plural and *vice versa* and words importing the masculine gender shall, where applicable, include the feminine and neuter genders. Unless the context otherwise requires, any references to persons shall include individuals, corporate bodies (wherever incorporated), unincorporated associations and partnerships;

(v) any reference in this Circular to any enactment is a reference to that enactment as for the time being amended or re-enacted. Any word defined under the Companies Act, the Securities and Futures Act, the Listing Manual or any modification thereof and not otherwise defined in this Circular shall, where applicable, have the same meaning ascribed to it under the Companies

Act, the Securities and Futures Act, the Listing Manual or such modification thereof, as the case may be, unless the context otherwise requires;

(vi) any reference to a time of a day in this Circular shall be a reference to Singapore time unless otherwise stated;

(vii) any discrepancies between the figures listed and the totals thereof are due to rounding. Accordingly, figures shown as totals in this Circular may not be an arithmetic aggregation of the figures that precede them; and

(viii) the headings in this Circular are inserted for convenience only and shall be ignored in construing this Circular.

CAUTIONARY NOTE ON FORWARD LOOKING STATEMENTS

All statements contained in this Circular, statements made in press releases and oral statements that may be made by the Company, the Group, their directors, executive officers or employees acting on their behalf, that are not statements of historical fact, constitute "forward looking statements". Some of these statements can be identified by words that have a bias towards, or are, forward-looking such as "anticipate", "believe", "could", "estimate", "expect", "forecast", "if", "intend", "may", "plan", "possible", "probable", "project", "should", "will" and "would" or similar words. However, Shareholders should note that these words are not the exclusive means of identifying forward looking statements. All statements regarding the Company's and the Group's expected financial position, business strategies, plans and prospects are forward looking statements.

These forward looking statements and other matters discussed in this Circular regarding matters that are not historical fact are only predictions. These forward looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's and the Group's actual future results, performance or achievements to be materially different from any future results, performance or achievements expected, expressed or implied by such forward looking statements.

Given the risks and uncertainties that may cause the Company's and the Group's actual future results, performance or achievements to be materially different from that expected, expressed or implied by the forward looking statements in this Circular, undue reliance must not be placed on these statements.

The Company, the Group, their respective directors and executive officers are not representing or warranting to you that the actual future results, performance or achievements of the Company and the Group will be as those discussed in those statements. The respective actual future results may differ materially from those anticipated in these forward looking statements as a result of the risks faced by us. Further, the Company and the Group disclaim any responsibility for updating any of those forward looking statements or publicly announcing any revisions to those forward looking statements to reflect their future developments, events or circumstances.

GOLDEN ENERGY AND RESOURCES LIMITED
(Incorporated in the Republic of Singapore)
(Company Registration No. 199508589E)

Directors:

Mr. Lay Krisnan Cahya (Non-Executive Chairman)
Mr. Fuganto Widjaja (Executive Director and Group CEO)
Mr. Dwi Prasetyo Suseno (Executive Director and Deputy Group CEO)
Mr. Mochtar Suhadi (Executive Director)
Mr. Lim Yu Neng Paul (Lead Independent Director)
Mr. Irwandy Arif (Independent Director)
Mr. Lew Syn Pau (Independent Director)
Mr. Djuangga Mangasi Mangunsong (Independent Director)

Registered Office:

20 Cecil Street
#05-05 PLUS
Singapore 049705

28 June 2018

To: The Shareholders of Golden Energy and Resources Limited

Dear Sir/ Madam

THE PROPOSED ACQUISITION AS AN INTERESTED PERSON TRANSACTION, COMPRISING:

(1) THE PROPOSED ACQUISITION OF 100% SHAREHOLDING INTEREST IN PT BARASENTOSA LESTARI, PT UNSOCO, PT DUTA SARANA INTERNUSA AND PT DWIKARYA SEJATI UTAMA; AND

(2) THE PROPOSED ACQUISITION OF US$6,368,158 MANDATORY CONVERTIBLE BONDS.

1. INTRODUCTION

1.1. Overview

On 12 May 2017, the Company announced that its 66.9998% owned subsidiary, PT Golden Energy Mines Tbk ("**GEMS**", together with its subsidiaries, the "**GEMS Group**"), had on 12 May 2017 entered into a conditional Sale and Purchase Agreement ("**Sale and Purchase Agreement**") with GMR Energy (Netherlands) B.V. ("**GMR Energy**") and GMR Infrastructure (Overseas) Limited ("**GMR Infrastructure**") (together, the "**GMR Vendors**"), pursuant to which the GEMS Group will acquire from the GMR Vendors:

(a) the Sale Shares (as defined herein) for an aggregate consideration of US$59,270,000 (the "**Sale Shares Acquisition**"); and

(b) the Mandatory Convertible Bonds (as defined herein) for an aggregate consideration of US$6,368,158 (the "**MCB Acquisition**"),

on such terms and conditions set out in the Sale and Purchase Agreement (the "**Proposed Acquisition**"). In view of the extended timeline, GEMS and the GMR Vendors had on 29 December 2017 entered into a supplemental agreement to the Sale and Purchase Agreement to extend the Long Stop Date from 31 December 2017 to 31 March 2018. On 21 March 2018,

GEMS and the GMR Vendors entered into a second supplemental agreement to the Sale and Purchase Agreement to further extend the Long Stop Date to 30 June 2018. On 22 June 2018, GEMS and the GMR Vendors entered into a third supplemental agreement to the Sale and Purchase Agreement to further extend the Long Stop Date to 31 August 2018. Please see Section 4 for more information on the Proposed Acquisition.

For the avoidance of doubt, the GMR Vendors shall not be bound to transfer any Sale Shares or Mandatory Convertible Bonds, and the GEMS Group shall not be bound to purchase any Sale Shares or Mandatory Convertible Bonds, unless the sale and purchase of all (and not some only) of the Sale Shares and Mandatory Convertible Bonds is completed at the same time.

The Proposed Acquisition constitutes an interested person transaction within the meaning of Chapter 9 of the Listing Manual. As its value exceeds 5% of the Group's latest audited NTA, the Proposed Acquisition is conditional upon the approval of Shareholders.

1.2. Purpose of this Circular

The Board wishes to convene the EGM to seek Shareholders' approval for the Proposed Acquisition.

The purpose of this Circular is to explain the reasons for, and to provide Shareholders with relevant information relating to the Proposed Acquisition, and to seek Shareholders' approval for the same at the EGM to be convened.

The SGX-ST assumes no responsibility for the contents of this Circular, including the accuracy of any of the statements or opinions made or reports or letters contained in this Circular.

2. INFORMATION ON THE TARGET COMPANIES

2.1. PT Barasentosa Lestari

PT Barasentosa Lestari ("**BSL**") is a limited liability company incorporated under the laws of Indonesia, having its registered office at Prudential Tower, 23rd Floor, Jalan Jenderal Sudirman Kav. 79, Jakarta 12910, Indonesia. BSL has an authorised capital of Rp3,500,000,000 and issued and paid-up capital of Rp3,500,000,000 divided into 3,500 shares each with nominal value of Rp1,000,000. The principal business of BSL is coal mining and coal trading.

BSL is the holder of a mining concession in respect of coal concession areas located over an area of 23,300 hectares in Musi Rawas, Musi Rawas Utara and Musi Banyuasin Regencies, South Sumatra, Indonesia. Please refer to Appendix 1 for more information on the coal concession area held by BSL.

The entire effective shareholding interest in BSL is held by the GMR Vendors directly and indirectly through PT Dwikarya Sejati Utama ("**DSU**"), PT Duta Sarana Internusa ("**DSI**") and PT Unsoco ("**UNS**").

2.2. PT Unsoco

PT Unsoco ("**UNS**") is a limited liability company incorporated under the laws of Indonesia, having its registered address at Prudential Tower 23rd floor, Jalan Jenderal Sudirman Kav. 79,

Jakarta 12910, Indonesia. UNS has an authorised capital of Rp4,000,000,000 and issued and paid-up capital of Rp1,000,000,000 divided into 100,000 shares each with nominal value of Rp10,000. UNS holds 0.03% shareholding interest in BSL. The principal business of UNS is management consulting, but operations are inactive as at the Latest Practicable Date.

2.3. PT Duta Sarana Internusa

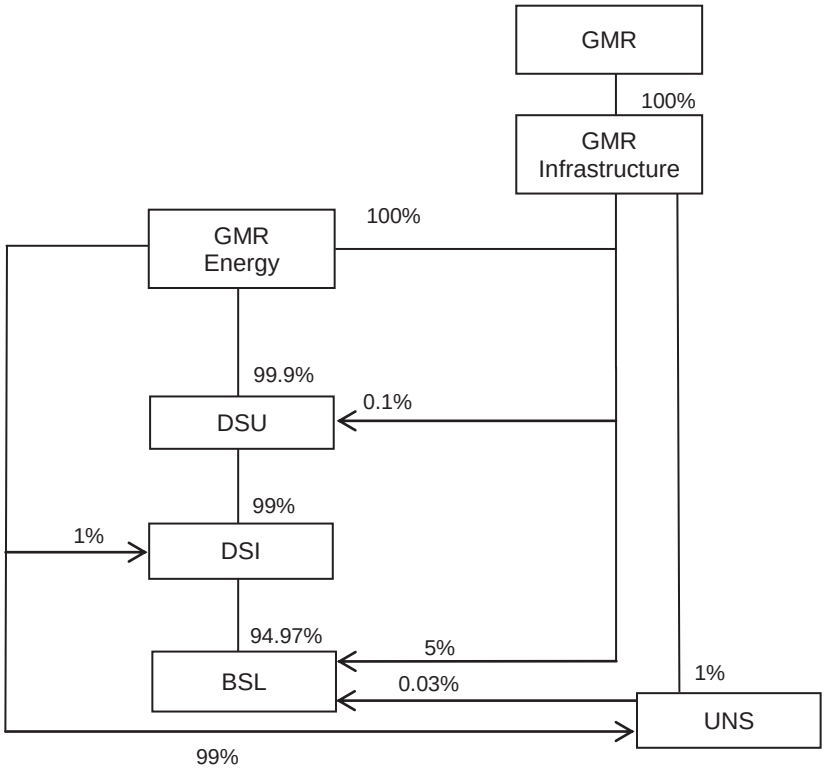
PT Duta Sarana Internusa ("**DSI**") is a limited liability company incorporated under the laws of Indonesia, having its registered address at Prudential Tower, 23rd Floor, Jalan Jenderal Sudirman Kav. 79, Jakarta 12910, Indonesia. DSI has an authorised capital of Rp4,000,000,000 and issued and paid-up capital of Rp1,000,000,000 divided into 1,000 shares each with nominal value of Rp1,000,000. DSI holds 94.97% shareholding interest in BSL. The principal business of DSI is management consulting, but operations are inactive as at the Latest Practicable Date.

2.4. PT Dwikarya Sejati Utama

PT Dwikarya Sejati Utama ("**DSU**") is a limited liability company incorporated under the laws of Indonesia, having its registered address at Prudential Tower, 23rd floor, Jalan Jenderal Sudirman Kav. 79, Jakarta 12910, Indonesia. DSU has an authorised capital of Rp4,000,000,000 and issued and paid-up capital of Rp1,000,000,000 divided into 1,000 shares each with nominal value of Rp1,000,000. DSU holds 99% shareholding interest in DSI. The principal business of DSU is management consulting, but operations are inactive as at the Latest Practicable Date.

2.5. Corporate Structure of the Target Group

The corporate structure of the Target Group as at the Latest Practicable Date is as follows:



Note: Please note that for the purpose of clarity, some subsidiaries or associated companies of the GMR Group have not been included in the above diagram. The diagram is for illustrative purposes only and does not comprise the entire GMR Group structure.

Please see Section 4.6 for the Group's structure upon Completion of the Proposed Acquisition.

2.6. Financial Highlights of the Target Group

The unaudited consolidated net asset value ("**NAV**") and net tangible liabilities ("**NTL**") attributable to the shareholders of the Target Group as at 31 March 2018 is approximately US$1,407,000 and US$77,493,000 respectively. The total assets and total liabilities of the Target Group as at 31 March 2018 is US$98,544,000 and US$97,137,000 respectively.

Based on the unaudited consolidated financial statements of the Target Group for the financial year ended 31 March 2018, the Target Group's loss before income tax, minority interest and extraordinary items is approximately US$269,000.

A summary of the financial information of the Target Group is set out in Appendix 2.

3. THE GMR VENDORS AND THE RELATIONSHIP WITH GEMS AND THE COMPANY

3.1. GMR Vendors

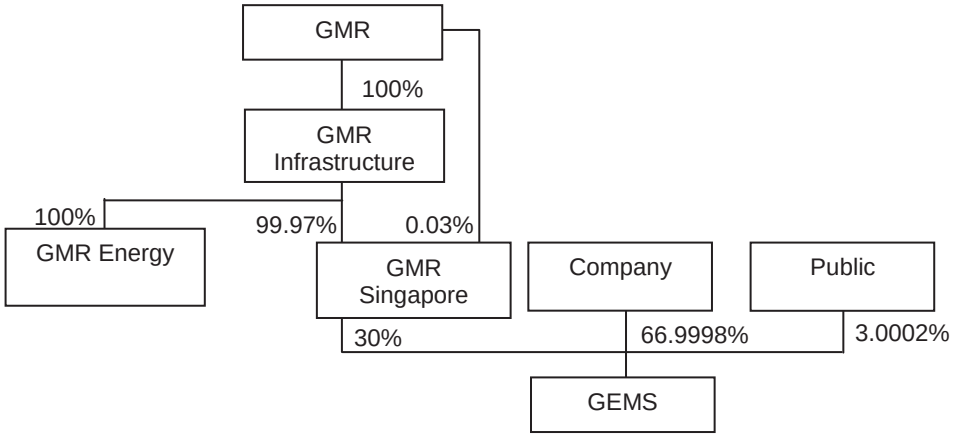
GMR Energy is an investment holding company incorporated in Netherlands, having its registered office at WTC Schiphol Airport, D Tower, 11th Floor, Schiphol Boulevard 359, 1118 BJ Schiphol, Amsterdam, the Netherlands. GMR Infrastructure is an investment holding company incorporated in Mauritius, having its registered office at 6th Floor, Tower A, 1 Cybercity, Ebene, Republic of Mauritius.

GMR Infrastructure is a direct wholly-owned subsidiary of GMR Infrastructure Ltd ("**GMR**", together with its subsidiaries, the "**GMR Group**"), an infrastructure developing company listed on the Bombay Stock Exchange and the National Stock Exchange of India. GMR Energy is a wholly-owned subsidiary of GMR Infrastructure.

3.2. The Relationship between the Company, GEMS and the GMR Vendors

GMR Coal Resources Pte Ltd ("**GMR Singapore**"), which is a member of the GMR Group, holds 30% of the entire issued and paid-up share capital of GEMS. The ultimate holding company of GMR Singapore and the GMR Vendors is GMR.

For illustrative purposes, please see the following diagrammatic chart outlining the relationship between the Company, GEMS and the GMR Vendors.



Note: For purposes of clarity, some subsidiaries, associated companies and related companies of GEMS, the Company, GMR, GMR Singapore and the GMR Vendors (as the case may be), including intermediate holding entities, have not been included.

4. THE PROPOSED ACQUISITION

4.1. Sale and Purchase Agreement

On 12 May 2017, GEMS entered into the Sale and Purchase Agreement with the GMR Vendors for the acquisition by the GEMS Group of the Sale Shares and the Mandatory Convertible Bonds, subject to the terms and conditions of the Sale and Purchase Agreement. The Mandatory Convertible Bonds were issued by DSU and held by the GMR Vendors.

On 29 December 2017, GEMS and the GMR Vendors entered into a supplemental agreement to the Sale and Purchase Agreement to extend the Long Stop Date from 31 December 2017 to 31 March 2018. On 21 March 2018, GEMS and the GMR Vendors entered into a second supplemental agreement to the Sale and Purchase Agreement to further extend the Long Stop Date to 30 June 2018. On 22 June 2018, GEMS and the GMR Vendors entered into a third supplemental agreement to the Sale and Purchase Agreement to further extend the Long Stop Date to 31 August 2018.

On the terms and subject to the conditions in the Sale and Purchase Agreement, the GMR Vendors (each as to those of the Sale Shares and Mandatory Convertible Bonds it respectively owns) shall jointly and severally sell to GEMS or PT GEMS Energy Indonesia (a 99.99%-owned subsidiary of GEMS) (together, the "**Purchasers**"), and the Purchasers shall acquire from the GMR Vendors, the Sale Shares and Mandatory Convertible Bonds.

4.2. Key Terms of the Proposed Acquisition

4.2.1. Sale Shares Acquisition

Pursuant to the Proposed Acquisition, the Purchasers shall acquire from the GMR Vendors:

(a) **BSL Shares.** 175 shares in the issued share capital of BSL, representing 5% of the total issued and paid up share capital of BSL, owned by GMR Infrastructure ("**BSL Shares**");

(b) **UNS Shares.** 100,000 shares in the issued share capital of UNS, representing 100% of

the total issued and paid up share capital of UNS, owned 99% by GMR Energy and 1% by GMR Infrastructure;

(c) **DSI Shares.** 10 shares in the issued share capital of DSI, representing 1% of the total issued and paid up share capital of DSI, owned by GMR Energy; and

(d) **DSU Shares.** 1,000 shares in the issued share capital of DSU, representing 100% of the total issued and paid up share capital of DSU, owned 99.9% by GMR Energy and 0.1% by GMR Infrastructure,

(together, the "**Sale Shares**") for an aggregate consideration of US$59,270,000, subject to the terms and conditions of the Sale and Purchase Agreement.

4.2.2. **MCB Acquisition**

Pursuant to the Proposed Acquisition, the Purchasers shall acquire from the GMR Vendors all the mandatory convertible bonds of aggregate face value of US$6,368,158 issued by DSU and held by the GMR Vendors ("**Mandatory Convertible Bonds**") for an aggregate consideration of US$6,368,158, subject to the terms and conditions of the Sale and Purchase Agreement.

Please see Section 5 for more information on the Mandatory Convertible Bonds.

4.2.3. **Terms of Sale**

The Sale Shares and Mandatory Convertible Bonds shall be sold and transferred free from Encumbrances and with all rights attached thereto as at the date of Completion ("**Completion Date**"). Without prejudice to the terms of the Sale and Purchase Agreement, the GEMS Group will assume the total liabilities of the Target Group on Completion.

4.2.4. **Consideration and Payment Terms**

The aggregate consideration payable by GEMS to the GMR Vendors for the Proposed Acquisition is US$65,638,158 (equivalent to approximately S$89,070,980.41 [1]) ("**Consideration**"), comprising an aggregate consideration of US$59,270,000 (equivalent to approximately S$80,429,390[1]) ("**Sale Shares Consideration**") for the Sale Shares Acquisition and aggregate consideration of US$6,368,158 (equivalent to approximately S$8,641,590.41[1]) ("**MCB Consideration**") for the MCB Acquisition.

The Consideration will be satisfied in the following manner:

(a) an amount of US$8,000,000 (equivalent to approximately S$10,856,000[1]) ("**First Refundable Amount**"), to be paid by GEMS to the GMR Vendors no later than five (5) Business Days from the date of the Sale and Purchase Agreement;

(b) an amount of US$15,790,000 (equivalent to approximately S$21,427,030[1]) ("**Second Refundable Amount**"), to be paid by GEMS to the GMR Vendors no later than five (5) Business Days following issuance of the clearance from the SGX-ST referred to in Section 4.3(i); and

[1] Based on the exchange rate of US$1:S$1.3570 as at the Latest Practicable Date.

(c) the remaining Consideration of US$41,848,158 (equivalent to approximately S$56,787,950.41[1]) ("**Balance Amount**"), comprising:

(i) US$35,480,000 (equivalent to approximately S$48,146,360[1]), being the remaining balance of the Sale Shares Consideration; and

(ii) US$6,368,158 (equivalent to approximately S$8,641,590.41[1]), being the full amount of the MCB Consideration,

to be paid by GEMS to the GMR Vendors on the Completion Date.

The SGX-ST provided the clearance referred to in Section 4.3(i) on 14 June 2018. For the avoidance of doubt, GEMS has paid the First Refundable Amount and Second Refundable Amount to the GMR Vendors.

The clearance of the SGX-ST is not to be taken as an indication of the merits of the Proposed Acquisition and all other transactions contemplated in the Sale and Purchase Agreement (together, the "**Transaction**"), the Company, the Group, the GMR Vendors, the Target Group, the Shares, the Sale Shares or the Mandatory Convertible Bonds.

4.2.5. **Basis of Consideration**

The Consideration was arrived at on a willing-buyer and willing-seller basis after taking into consideration, *inter alia*, the following factors:

(a) the face value of the Mandatory Convertible Bonds;

(b) the prospects of BSL;

(c) the current market prices for comparable coal quality;

(d) the audited financial results of BSL for the 9-months financial period ended 31 December 2016;

(e) draft fairness opinion prepared by Kantor Jasa Penilai Publik Jennywati, Kusnanto & rekan ("**KJPP JKR**") on the fair market value of the Sale Shares ("**Fairness Opinion**"); and

(f) the independent qualified person's reports on the north block and south block of the BSL Coal Concession Area conducted by Salva Mining in accordance with the VALMIN Code and JORC Code (as applicable), with an effective date of 1 April 2017, dated 7 April 2017[2].

Fairness Opinion

[2] For the purpose of this Circular, the Company commissioned Salva Mining to update the independent qualified person's report in respect of the BSL Coal Concession Area to an effective date of 31 December 2017. The BSL Independent Qualified Person's Reports, being the updated reports with an effective date of 31 December 2017, are set out in Appendices 4A and 4B to this Circular.

(i) As GEMS is a company listed on the Indonesia Stock Exchange ("**IDX**"), it is required under the listing rules of the IDX to appoint independent appraisers to give an opinion on the fairness of the Proposed Acquisition. Based on the Fairness Opinion dated 12 May 2017 ("**Final Fairness Opinion**"), KJPP JKR is of the opinion that, having regard to the assumptions and factors set out in the Final Fairness Opinion, the Proposed Acquisition is fair. As stated in the Final Fairness Opinion, the total fair market value of the Sale Shares and Mandatory Convertible Bonds is US$66.62 million calculated by aggregating the following:

(A) US$61.46 million, being the fair market value of 100% shareholding in shares of DSU (for the avoidance of doubt, taking into account the Mandatory Convertible Bonds of face value US$6,368,158);

(B) US$0.70 million, being the fair market value of 1% shareholding interest in DSI;

(C) US$4.42 million, being the fair market value of 5% shareholding interest in BSL; and

(D) US$0.04 million, being the fair market value of 100% shareholding interest in UNS.

The fairness opinion on the Proposed Acquisition in the Final Fairness Opinion was estimated as of 31 December 2016.

(ii) In connection with the Final Fairness Opinion, GEMS also appointed KJPP JKR to give an opinion, as independent appraisers, on the fair market value of 100% shares of DSU and its subsidiaries ("**DSU Valuation Report**") and the fair market value of 100% shares of UNS ("**UNS Valuation Report**").

Please refer to the Company's announcement dated 22 June 2018 for a copy of the Final Fairness Opinion, DSU Valuation Report and UNS Valuation Report.

KJPP JKR is a registered Office of Public Appraisal Services (Kantor Jasa Penilai Publik) based on the Ministry of Finance Decree No. 2.09.0022 dated 24 March 2009 and listed as a capital market supporting profession of the Capital Market and Financial Institutions Supervisory Agency ("**Bapepam-LK**") under Registered Letter of Capital Market Supporting Profession of Bapepam-LK No. 05/BL/STTD-P/B/2010 (business appraisers).

4.2.6. **Long Stop Date; Refund of Consideration Paid**

Subject to the terms of the Sale and Purchase Agreement, GEMS, GMR Energy and GMR Infrastructure shall each be entitled to terminate the Sale and Purchase Agreement at any time on or prior to the Long Stop Date in the event, *inter alia*, any of the Conditions Precedent (as defined herein) is or is reasonably likely to become incapable of satisfaction and such Condition Precedent has not been waived. Upon termination of the Sale and Purchase Agreement, the Parties shall not have a claim against the other Parties under the Sale and Purchase Agreement, except for any claim arising from any breaches by the other Party of (a) the Sale and Purchase Agreement on or prior to such termination; or (b) the surviving provisions under the Sale and Purchase Agreement after such termination.

In the event the Sale and Purchase Agreement is terminated, any Consideration already paid

by GEMS to the GMR Vendors as at the date of such termination shall at all times be refunded to GEMS within five (5) Business Days from such termination.

4.3. Conditions Precedent

Completion is conditional upon satisfaction or waiver (in accordance with the Sale and Purchase Agreement) of, conditions precedent set out in the Sale and Purchase Agreement ("**Conditions Precedent**"), including but not limited to the following key Conditions Precedent:

(a) GMR Vendor Shareholders' Approval

Each of the GMR Vendors having obtained and provided a copy to GEMS of the GMR Vendors' approval from its respective shareholders of the Transaction (the "**GMR Vendor Shareholders' Approval**") as required under its constitutional documents and applicable law, and such approval not having been cancelled, revoked or withdrawn.

(b) Target Group Company Shareholders' Approval

The shareholders' approval of each Target Group Company for the Proposed Acquisition (including (i) the sale and transfer of the Sale Shares and the Mandatory Convertible Bonds, (ii) the waiver of the shareholders' rights of first refusal over the relevant Sale Shares, (iii) appointment or nomination of all commissioners and directors nominated by GEMS, which appointment or nomination shall take effect on and with effect from the Completion Date, (iv) the discharge of all existing commissioners and directors as may have been nominated or appointed by the GMR Vendors, which discharge and retirement shall take effect on and with effect from the Completion Date, and (v) the conversion of the status of the Target Group Company into a company without foreign shareholding ownership (*PT Biasa* or *PT Penanaman Modal Dalam Negeri*)), having been obtained and such approval not having been cancelled, revoked or withdrawn.

(c) Third Party Approvals

(i) Each Target Group Company having obtained all required and necessary consents and/or approvals (including without limitation the creditors' consents and all approvals from governmental authorities (including the Ministry of Energy and Mineral Resources and Investment Coordinating Board of Indonesia (*Badan Koordinasi Penanaman Modal*))) for the Transaction, and such consent or approval not having been cancelled, revoked, or withdrawn.

(ii) GEMS having obtained all required or necessary consents and/or approvals from third parties, if any, for the Transaction, and such consents and/or approvals not having been cancelled, revoked or withdrawn.

(d) Restructuring Undertakings

The GMR Vendors providing satisfactory evidence to GEMS that:

(i) the facility agreement between ICICI Bank Limited ("**ICICI**") and BSL dated 28 March 2013 ("**ICICI Loan Agreement**") in respect of the US$40,000,000 loan facility ("**ICICI Loan Facility**") have been duly restructured on terms largely comparable to the current terms, provided that BSL arranges/provides the necessary security for the ICICI Loan Facility as requested by ICICI for accepting

the change in ownership of BSL from the GMR Vendors to GEMS;

(ii) the loan facility provided by GMR Energy to DSI ("**GMR-DSI Loan Facility**") is restructured to become interest free and payable within a period of four years from Completion, and the GMR Vendors shall cause such loan facilities to be duly amended based on the foregoing and the payment will depend on the operation of BSL; and

(iii) the BSL Shares are free from Encumbrances.

Based on the terms of the ICICI Loan Agreement (as amended by the supplemental agreement dated 22 March 2017), the ICICI Loan Facility is repayable in 9 years from the first utilisation date in 10 equal instalments, each instalment payable every 6 months. As at 31 March 2018, the outstanding principal amount of the ICICI Loan Facility was US$36.00 million. As security for the ICICI Loan Facility, BSL has provided to ICICI, *inter alia*, fiducia security over its insurance, inventory and receivables. In addition, 60% of shares in BSL held by DSI, UNS and GMR Infrastructure are pledged as security. GMR, the ultimate parent company of the GMR Vendors, provided the corporate guarantee for the loan.

As at 31 March 2018, the outstanding principal amount of the GMR-DSI Loan Facility was approximately US$29.82 million. The loan facility is included in the line item 1 under the current liability section of the balance sheet of the Target Group, set out in paragraph (B) of Appendix 2 to this Circular.

(e) Warranties of GEMS and the GMR Vendors

The warranties provided by GEMS and the GMR Vendors in the Sale and Purchase Agreement being true and accurate in all material respects as at the date of the Sale and Purchase Agreement and as at the Completion Date as if made on the Completion Date.

(f) GMR Vendors Pre-Completion Undertakings

The GMR Vendors having in all material respects performed or complied with each of the undertakings of the GMR Vendors in the Sale and Purchase Agreement which are required to be performed or complied with by it on or prior to the Completion Date ("**GMR Vendors Pre-Completion Undertakings**").

The GMR Vendors Pre-Completion Undertakings include, *inter alia*, the following:

(i) the GMR Vendors shall not, and no affiliate of the GMR Vendors shall, enter into, continue or solicit discussions or negotiations with or provide any information to any third party who may be interested in acquiring the whole or part of the Sale Shares or the Mandatory Convertible Bonds or the undertaking, business or assets of the Target Group Companies; and

(ii) the GMR Vendors shall procure that no Target Group Company shall:

(1) make any material amendments to the existing business plans of each Target Group Company or make any changes to the nature and scope of its business;

(2) enter into any abnormal or unusual contract or commitment which is outside the ordinary course of business or not on arm's length terms;

(3) incur any borrowings or indebtedness on behalf of the Target Group exceeding the agreed threshold;

(4) do or omit to do anything which might result in the termination, surrender, revocation, suspension, modification or non-renewal of any license held by any Target Group Company;

(5) fail to observe and perform any material term or condition of, or waive any rights under, any contract or arrangement; and

(6) create, issue, purchase or redeem any class of share or loan capital.

(g) Approvals of GEMS

GEMS having obtained approvals as required under its constitutional documents and applicable law, and such approval not having been cancelled, revoked or withdrawn.

(h) Shareholders' Approval

The resolution of the Shareholders of the Company having been obtained at an extraordinary general meeting of the Company for the entry into, implementation and completion of, the Transaction, as required under the listing rules of the SGX-ST.

(i) Clearance of the SGX-ST

The Transaction being cleared by the SGX-ST, and if such clearance granted or obtained is subject to any conditions, such conditions being reasonably acceptable to GEMS and the GMR Vendors.

(j) Newspaper Announcement and No Objection

GEMS and each Target Group Company having announced the proposed sale and transfer of the Sale Shares in a national newspaper and to its employees (as applicable) at least thirty (30) calendar days prior to the date of the notice of the general meeting of the shareholders of BSL as stipulated in Article 127 paragraph (2) of Law No. 40 of 2007, and no creditor has submitted any objection to any Target Group Company.

(k) Others

(i) GEMS having paid in full the First Refundable Amount and the Second Refundable Amount.

(ii) There being no final and non-appealable order, decree or ruling or any other action issued or taken by any court of competent jurisdiction, stock exchange, lender, or any other governmental authority having jurisdiction over the Transaction, which permanently restrains or otherwise prohibits the Transaction, or objects to, refuses to give the necessary regulatory approvals or clearances, or otherwise refuses to do anything necessary to permit the Transaction.

For the avoidance of doubt, GEMS has paid the First Refundable Amount and Second Refundable Amount to the GMR Vendors.

4.4. Warranties and Undertakings

Each of GEMS and the GMR Vendors has provided such undertakings and warranties as are customary for transactions of this nature or other similar transactions.

4.5. Indemnity

The GMR Vendors shall jointly and severally indemnify and hold harmless in full GEMS, *inter alia*, for an amount equal to:

(a) the proportion of any payment of taxation made or to be made by the Target Group, the liability for which arises as a result of any transactions occurring on or before Completion (other than taxation arising in respect of income, profits or gains earned after Completion as a result of any such transactions or any liabilities to pay stamp duty) or in respect of any profits earned on or before the Completion Date;

(b) any out-of-pocket costs or expenses reasonably and properly incurred by GEMS and/or any Target Group Company solely and directly in connection with any payment of taxation or the non-availability, loss, reduction or cancellation of a right to a repayment of taxation as is, in each case, referred to in the above paragraph (a) or in connection with any action taken in avoiding, resisting or settling any such payment of taxation or such non-availability, loss, reduction or cancellation of a right to a repayment of taxation, whether or not any company is or may be entitled to claim reimbursement of the payment from any person;

(c) any losses, damage, costs, charges, expenses (including legal fees), fines, penalties or other liabilities arising from out of or in connection with a breach by any GMR Vendor of the warranties and undertakings given by the GMR Vendors; and

(d) any losses, damage, costs, charges, expenses (including legal fees), fines, penalties or other liabilities arising from out of or in connection with the failure by the GMR Vendors and/or any other Target Group Company to procure the GMR Vendors Pre-Completion Undertakings.

4.6. Completion and the Group's Structure upon Completion

Completion will take place on the date that the Conditions Precedent have been satisfied or waived, as the case may be (or at such other date as GEMS and the GMR Vendors may agree in writing). The GMR Vendors shall not be bound to transfer any Sale Shares or Mandatory Convertible Bonds, and the GEMS Group shall not be bound to purchase any Sale Shares or Mandatory Convertible Bonds, unless the sale and purchase of all (and not some only) of the Sale Shares and Mandatory Convertible Bonds is completed at the same time.

On Completion, all of the following shall be effected:

(a) <u>GEMS' Obligations</u>

GEMS shall pay the Balance Amount to the GMR Vendors. In addition, GEMS shall deliver, *inter alia*, the following to the GMR Vendors:

(i) certified true copies of resolutions passed by the board of directors and/or shareholders of GEMS approving the Transaction; and

(ii) documents evidencing payment of the Consideration to the designated account of the GMR Vendors.

(b) GMR Vendors' Obligations

Against payment of the Consideration in full, the GMR Vendors shall execute a deed of transfer in respect of the Sale Shares and the Mandatory Convertible Bonds with the Purchaser named as the transferee. In addition, the GMR Vendors shall deliver, *inter alia*, the following to GEMS:

(i) certified true copies of resolutions passed by the shareholders of each Target Group Company approving, on and with effect from the Completion Date: (1) the appointment of the new commissioners and new directors nominated by GEMS; and (2) the resignation of all commissioners and directors nominated by the GMR Vendors;

(ii) certified true copies of the duly executed GMR Vendor Shareholders' Approval;

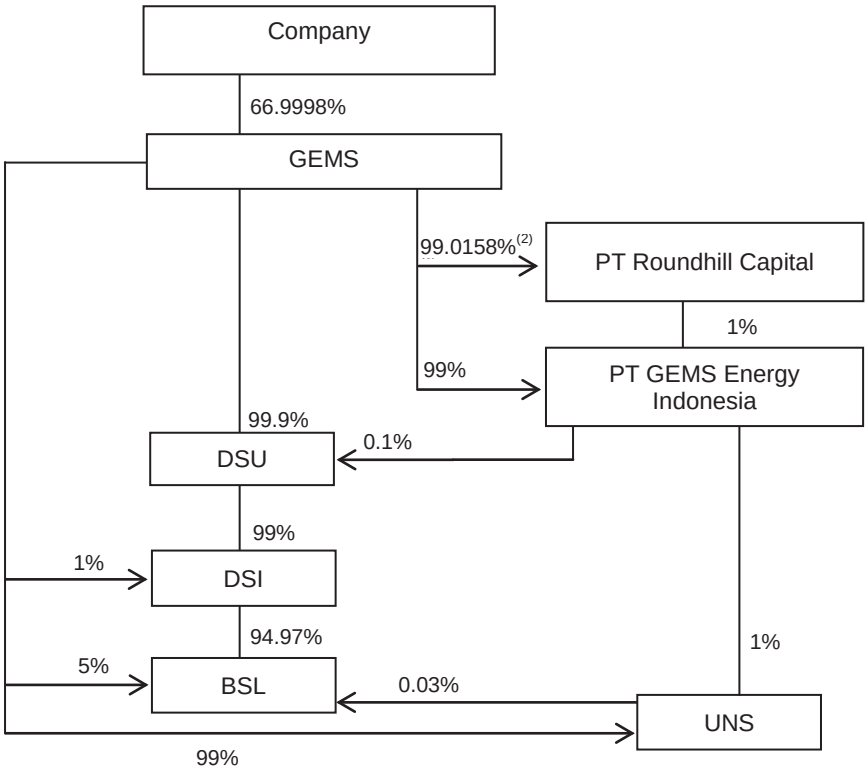
(iii) original share certificates representing the Sale Shares under the name of the Purchaser;

(iv) original certificates representing the Mandatory Convertible Bonds; and

(v) the financial accounting and tax records, corporate documents, licences, banking records, all documents relating or underlying the assets, and all documents relating to any dispute or legal proceedings of each Target Group Company, for the period specified in the Sale and Purchase Agreement.

Group's Structure upon Completion

The shareholding structure of the Target Group on completion of the Proposed Acquisition is as follows:



Notes:

(1) Please note that for the purpose of clarity, some subsidiaries or associated companies of the Group have not been included in the above diagram. The diagram is for illustrative purposes only and does not comprise the entire Group structure.

(2) The remaining 0.9842% interest in PT Roundhill Capital is held by DSS. DSS holds 86.87% shareholding interest in the Company.

As illustrated in the above Group structure upon completion of the Proposed Acquisition:

(a) PT GEMS Energy Indonesia will hold 1% shareholding interest in UNS. The consideration payable by PT GEMS Energy Indonesia to the GMR Vendors in respect of the 1% shareholding interest in UNS is US$435, such amount being determined by reference to the fair market value of 100% shareholding interest in UNS of US$0.04 million (please see Section 4.2.5(i)(D) above); and

(b) PT GEMS Energy Indonesia will hold 0.1% shareholding interest in DSU. The consideration payable by PT GEMS Energy Indonesia to the GMR Vendors in respect of the 0.1% shareholding interest in DSU is US$54,187, such amount being determined by reference to the estimated equity value of 100% shareholding in DSU of US$55.09 million (the "**DSU Equity Value**"). The DSU Equity Value is calculated by deducting US$6,368,158 (being the face value of the Mandatory Convertible Bonds held by DSU) from the fair market value of 100% shareholding interest in DSU of US$61.46 million (please see Section 4.2.5(i)(A) above).

4.7. Rationale for the Proposed Acquisition

The Proposed Acquisition is in line with the Group's strategic plans to expand its business operations and increase its coal reserves and production levels, thereby bringing additional value to the Company and its Shareholders. The Proposed Acquisition will provide the

Company access to and control over the coal concession and coal deposits in the coal mining license area of BSL, the description of which are set out in Appendix 1 to this Circular. This acquisition would increase the Company's quantity of high calorific value coal resources available for production. In April 2016, President Joko Widodo of Indonesia announced the moratorium on new permits for, amongst others, mining activities, whereby the Indonesia Government will cease issuing new permits or licenses to palm oil and mining companies. In view of the said moratorium, the Company desires to increase its coal reserves through acquisition exercises to sustain its mining operations as harvesting and selling the existing coal reserves would eventually deplete its coal reserves.

The MCB Acquisition was negotiated as an integral part of the Sale Shares Acquisition.

4.8. Source of Funds for the Proposed Acquisition

The Proposed Acquisition will be funded by GEMS' internal resources.

Based on Salva Mining's estimates in the BSL Independent Qualified Person's Report (South Block), the total capital cost estimate for the ramp-up of the facilities at the mine, including mining, logistics and associated infrastructure, is estimated to be US$29.05 million ("**Capital Expenditure**") The amount of US$29.05 million represents the estimated capital expenditure for the South Block over the life of mine. The breakdown of the Capital Expenditure is as follows:

Capital Cost (Real Terms)

Sr. No.	Particulars	Direct Cost ($M)	Contingency ($M)	Total Cost ($M)
1.1	Land Compensation	6.96	1.04	8.00
1	Land Compensation	6.96	1.04	8.00
2.1	Workshop, Office and Laboratory	1.10	0.17	1.27
2.2	Backup Power Generation	0.40	0.06	0.46
2.3	Coal Handling Equipment	1.00	0.15	1.15
2.4	Accommodation Camp	1.00	0.15	1.15
2.5	Fuel Storage	0.80	0.12	0.92
2.6	Water Supply and Sewage System	0.50	0.08	0.58
2.7	Communications	0.50	0.08	0.58
2	Mine Infrastructure	5.30	0.80	6.10
3.1	Road Upgrade Mine to Port	8.00	1.20	9.20
3.2	Port Stockpile and Jetty	5.00	0.75	5.75
3	Road & Port Facilities	13.00	1.95	14.95
0	**Total Project Cost**	**25.26**	**3.79**	**29.05**

Note: Individual totals may differ due to rounding
Source: BSL Independent Qualified Person's Report (South Block)

GEMS intends to finance the Capital Expenditure by way of a combination of GEMS' internal resources and debt financing. As the North Block is in the early stages of exploration, no JORC-compliant resources and reserves have been estimated. As such, it is not feasible to provide the estimated capital expenditure to bring the North Block to commercial production.

4.9. Directors' Service Agreement(s)

No person is proposed to be appointed as a Director of the Company or a director of GEMS in connection with the Proposed Acquisition. Accordingly, no service contract is proposed to be entered into between the Company or GEMS and any such person.

5. THE MANDATORY CONVERTIBLE BONDS

5.1. Overview

Pursuant to the mandatory convertible bonds issuance agreement dated 10 April 2008 (as amended, supplemented or otherwise modified) ("**MCB Series A Issuance Agreement**") and the mandatory convertible bonds issuance agreement dated 25 November 2008 (as amended, supplemented or otherwise modified) ("**MCB Series B Issuance Agreement**"), DSU issued mandatory convertible bonds to independent third parties ("**Third Party Transferors**").

The Mandatory Convertible Bonds of face value US$6,368,158, which represents the entire outstanding mandatory convertible bonds issued by DSU, were acquired by the GMR Vendors from the Third Party Transferors in 2009. The Mandatory Convertible Bonds comprise the following:

(a) mandatory convertible bonds of face value US$5,646,300 issued pursuant to the MCB Series A Issuance Agreement ("**MCB Series A**"), held by GMR Energy; and

(b) mandatory convertible bonds of face value US$721,858 issued pursuant to the MCB Series B Issuance Agreement ("**MCB Series B**"), of which (i) mandatory convertible bonds of face value US$534,975 are held by GMR Energy and (ii) mandatory convertible bonds of face value US$186,883 are jointly held by GMR Energy and GMR Infrastructure.

5.2. Key terms of the MCB Series A

The principal terms and conditions of the MCB Series A are as follows:

MCB Series A Principal Amount	:	US$5,646,300.
MCB Series A Interest	:	The MCB Series A bear no interest.
MCB Series A Maturity Date	:	10 April 2019
Status of the MCB Series A	:	The MCB Series A constitute mandatory unsecured obligations of DSU and shall at all times rank *pari passu* with other mandatory convertible bonds issued by DSU pursuant to the MCB Series A Issuance Agreement.
MCB Series A Conversion Price	:	Rp1,000,000 per MCB Series A Conversion Share. The term "**MCB Series A Conversion Share**" refers to a common share in the capital of DSU of a nominal value of Rp1,000,000.
Number of MCB Series A Conversion Shares	:	Each MCB Series A is convertible into MCB Series A Conversion Shares resulting from dividing the MCB Series A Principal Amount in Rp amount by the MCB Series A Conversion Price.
Status of MCB Series A	:	The MCB Series A Conversion Shares shall, when

Conversion Shares		allotted and issued, be credited as fully paid-up.
MCB Series A Conversion	:	Subject to the approval of the shareholders of DSU in a general meeting and creditors of DSU and any applicable laws and regulations, DSU shall, pursuant to the conversion notice by the MCB Series A Majority Bondholder to be provided to DSU at least 5 business days prior to such conversion, convert the MCB Series A into MCB Series A Conversion Shares. A conversion notice may be issued by the MCB Series A Majority Bondholder at any time prior to the MCB Series A Maturity Date. In the event the MCB Series A Majority Bondholder gives a conversion notice, any and all MCB Series A shall be converted into MCB Series A Conversion Shares. A "**MCB Series A Majority Bondholder**" refers to a holder of more than 60% of the aggregate principal amount of the outstanding MCB Series A.
Mandatory Conversion	:	The MCB Series A shall be mandatorily converted into MCB Series A Conversion Shares on the MCB Series A Maturity Date.

5.3. Key terms of the MCB Series B

The principal terms and conditions of the MCB Series B are as follows:

MCB Series B Principal Amount	:	US$721,858.
MCB Series B Interest	:	The MCB Series B bear no interest.
MCB Series B Maturity Date	:	25 November 2018
Status of the MCB Series B	:	The MCB Series B constitute mandatory unsecured obligations of DSU and shall at all times rank *pari passu* with other mandatory convertible bonds issued by DSU pursuant to the MCB Series B Issuance Agreement.
MCB Series B Conversion Price	:	Rp1,000,000 per MCB Series B Conversion Share. The term "**MCB Series B Conversion Share**" refers to a common share in the capital of DSU of a nominal value of Rp1,000,000.
Number of MCB Series B Conversion Shares	:	Each MCB Series B is convertible into MCB Series B Conversion Shares resulting from dividing the MCB Series B Principal Amount in Rp amount by the MCB

Series B Conversion Price.

Status of MCB Series B Conversion Shares	:	The MCB Series B Conversion Shares shall, when allotted and issued, be credited as fully paid-up.
MCB Series B Conversion	:	Subject to the approval of the shareholders of DSU in a general meeting and creditors of DSU and any applicable laws and regulations, DSU shall, pursuant to the conversion notice by the MCB Series B Majority Bondholder to be provided to DSU at least 5 business days prior to such conversion, convert the MCB Series B into MCB Series B Conversion Shares. A conversion notice may be issued by the MCB Series B Majority Bondholder at any time prior to the MCB Series B Maturity Date. In the event the MCB Series B Majority Bondholder gives a conversion notice, any and all MCB Series B shall be converted into MCB Series B Conversion Shares. A "**MCB Series B Majority Bondholder**" refers to a holder of more than 60% of the aggregate principal amount of the outstanding MCB Series B.
Mandatory Conversion	:	The MCB Series B shall be mandatorily converted into MCB Series B Conversion Shares on the MCB Series B Maturity Date.

5.4. Other information

The Mandatory Convertible Bonds are reflected as the second line item under the Shareholders' Equity section of the balance sheet of the Target Group, set out in paragraph (B) of Appendix 2 to this Circular. The book value of the Mandatory Convertible Bonds for the financial years ended 31 March 2016, 31 March 2017 and 31 March 2018 are US$6,368,158, US$6,368,158 and US$6,368,158, respectively.

6. VALUATION

Other than the DSU Valuation Report and the UNS Valuation Report commissioned by GEMS (as mentioned in Section 4.2.5), there is no other valuation report on the Sale Shares and/or the Mandatory Convertible Bonds commissioned by the Group.

The Company has commissioned Salva Mining to prepare independent qualified person's reports on the BSL Coal Concession Area in accordance with the JORC Code and VALMIN Code. Based on the BSL Independent Qualified Person's Reports, Salva Mining is of the opinion that:

(a) as at 31 December 2017, the project value of the South Block (on a 100% basis) is in the range of US$180 million to US$317 million, with a preferred value of US$248 million; and

(b) as at 31 December 2017, the project value of the North Block (on a 100% basis) is in the range of US$14.2 million to US$26.4 million, with a preferred value of US$20.3 million.

Accordingly, based on the BSL Independent Qualified Person's Reports, the aggregate preferred valuation of the BSL Coal Concession Area (comprising the North Block and South Block) (on a 100% basis) as at 31 December 2017 is US$268.3 million.

Please refer to Appendix 1 to this Circular and the BSL Independent Qualified Person's Reports as set out in Appendices 4A and 4B to this Circular for further details including the methodologies and principal assumptions used in arriving at the above valuation in respect of the South Block and North Block respectively.

7. FINANCIAL EFFECTS OF THE PROPOSED ACQUISITION

7.1. Bases

The combined proforma financial effects of the Proposed Acquisition on the Group are based on:

(a) the audited consolidated financial statements of the Group for the financial year ended 31 December 2017 ("**FY2017**"); and

(b) the unaudited consolidated financial statements of the Target Group for the 12-months financial period ended 31 December 2017 ("**12-months Unaudited Target Group Consolidated Financial Statements**").

The 12-months Unaudited Target Group Consolidated Financial Statements have been prepared based on: (i) the unaudited consolidated financial statements of DSU and its subsidiaries for the 3-months financial period ended 31 March 2017; (ii) the audited financial statements of DSU and its subsidiaries for the 9-months financial period ended 31 December 2017; (iii) the unaudited financial statements of UNS for the 3-months financial period ended 31 March 2017; and (iv) the audited financial statements of UNS for the 9-months financial period ended 31 December 2017. For the purposes of illustrating the financial effects, adjustment to align the financial year end of the Group with that of the Target Group has been performed.

7.2. Assumptions

For the purposes of illustrating the financial effects of the Proposed Acquisition, the financial effects have been prepared based on, *inter alia*, the above bases and the following assumptions:

(a) the financial effects of the Proposed Acquisition on the Group's NTA is computed assuming that the Proposed Acquisition is completed on 31 December 2017;

(b) the financial effects of the Proposed Acquisition on the Group's EPS is computed assuming that the Proposed Acquisition is completed on 1 January 2017; and

(c) costs and expenses in connection with the Proposed Acquisition are disregarded for the purposes of calculating the financial effects.

7.3. Combined Proforma Financial Effects

The proforma financial effects of the Proposed Acquisition as set out below are strictly for illustrative purposes and do not necessarily reflect the actual financial position and performance of the Company or the Group, prepared according to the relevant accounting standards, following the Proposed Acquisition.

7.3.1. Effect on NTA per Share

	As at 31 December 2017	Immediately following completion of the Proposed Acquisition
NTA of the Group (US$'000)	284,887	144,151[(1)]
Number of Shares excluding Treasury Shares	2,353,100,380	2,353,100,380
NTA Per Share (US cents)	12.11	6.13

Note:

(1) The NTA of the Group decreased by US$140,736,000 to US$144,151,000 due to deduction of (i) goodwill of US$64,165,000 arising from consolidation upon completion of the Proposed Acquisition; and (ii) intangible assets of US$76,571,000 which relates to the mining properties of the Target Group.

7.3.2. Effect on EPS

	FY2017	Immediately following completion of the Proposed Acquisition
Net profit of the Company and its subsidiaries for FY2017(US$)	62,950,000	62,760,000[(1)]
Weighted average number of Shares in issue[(2)]	2,353,100,380	2,353,100,380
Net profit per Share (US cents)	2.68	2.67
- Basic and diluted		

Notes:

(1) Applying the 12-months Unaudited Target Group Consolidated Financial Statements.

(2) The weighted average number of ordinary shares for the year is calculated based on the weighted average effect of new shares issued by the Company during the year.

7.3.3. Effect on Share Capital

The Proposed Acquisition will not have any impact on the issued share capital and shareholding structure of the Company as the Proposed Acquisition does not involve the allotment and issuance of any new shares in the Company and the Consideration is to be satisfied in cash only.

8. LISTING MANUAL COMPUTATIONS (RELATIVE FIGURES UNDER RULE 1006)

The relative figures of the Proposed Acquisition computed on the bases set out in Rule 1006(a) to (e) of the Listing Manual are as follows:

Rule 1006(a): Net asset value of assets to be disposed of, compared with the Group's net asset value	Not applicable
Rule 1006(b): Net profits attributable to the assets acquired, compared with the Group's net profits	-0.12%(1)
Rule 1006(c): Aggregate value of the consideration given or received, compared with the Company's market capitalisation based on the total number of issued shares excluding treasury shares	8.61%(2)
Rule 1006(d): Number of equity securities issued by the Company as consideration for an acquisition, compared with the number of equity securities previously in issue	Not applicable
Rule 1006(e): Aggregate volume or amount of proved and probable reserves to be disposed of, compared with the aggregate of the Group's proved and probable reserves	Not applicable

Notes:

(1) The relative figure for Rule 1006(b) is negative because the net loss of the Target Group for the 3-months ended 31 March 2018 was approximately US$73,000, whilst the net profits of the Group for the 3-months ended 31 March 2018 (being the Group's latest announced consolidated accounts) was US$59,864,000. Under Rule 1002(3) of the Listing Manual, net profits means "profit or loss before income tax, minority interests and extraordinary items".

(2) Based on the Consideration for the Proposed Acquisition and the Company's market capitalisation as at 11 May 2017, being the market day immediately preceding the date of the Sale and Purchase Agreement. The market capitalisation of the Company is derived by multiplying 2,353,100,380 ordinary shares in issue by the volume-weighted average traded price of S$0.4501 on 11 May 2017. (Source: Bloomberg L.P.)[3]

As the relative figures computed under Rules 1006(c) of the Listing Manual exceeds 5% but does not exceed 20%, the Proposed Acquisition therefore constitutes a "Discloseable Transaction" as defined under Chapter 10 of the Listing Manual. Accordingly, the Proposed Acquisition is not conditional upon approval by the Shareholders under Chapter 10 of the Listing Manual.

9. THE PROPOSED ACQUISITION AS AN INTERESTED PERSON TRANSACTION

9.1. Proposed Acquisition as an Interested Person Transaction

As disclosed in the Company's circular to Shareholders dated 30 January 2015 ("**RTO Circular**") in relation to the Company's acquisition of 66.9998% of the issued and paid-up share capital of GEMS ("**RTO**"), GMR Singapore is regarded as an "interested person" of the Company by virtue of its ownership of 30% of the entire issued share capital of GEMS (notwithstanding that GMR Singapore does not have any interest in the Company). Consequently, transactions between GMR Singapore or any of its associates, and the Group will be regarded as "interested person transactions" and subject to the provisions of Chapter 9 of the Listing Manual.

[3] Bloomberg L.P. has not consented to the inclusion of the volume-weighted average price of the Company on 11 May 2017 referred to in this section and thereby is not liable for the information. The Board has included the information in the proper form and context in this Circular and has not verified the accuracy of the information.

GMR Vendors are wholly-owned subsidiaries of GMR, which holds the entire interest in GMR Singapore directly and indirectly through GMR Infrastructure[4]. As such, the GMR Vendors are each associates of GMR Singapore and thus each an "interested person".

Accordingly, the Proposed Acquisition is regarded as an "interested person transaction" under Chapter 9 of the Listing Manual.

9.2. Materiality Thresholds under Chapter 9 of the Listing Manual

Under Chapter 9 of the Listing Manual, Shareholders' approval is required for an interested person transaction of a value equal to, or exceeding, 5% of the Group's latest audited NTA.

Under Rule 909(1) of the Listing Manual, in the case of a partly-owned subsidiary, the value of the transaction (being the amount at risk to the issuer) is the issuer's effective interest in that transaction. As GEMS is a 66.9998% owned subsidiary of the Company, the amount at risk to the Company in the Proposed Acquisition is US$43,977,434.58. However, as the financial performance, assets and liabilities of the Target Group will be entirely consolidated with the Company's consolidated financial statements, the Company believes that using the Consideration of US$65,638,158 would be a better reflection of the amount at risk of the Proposed Acquisition to the Company.

Based on the Group's latest audited NTA of US$284,887,000[5], the amount at risk of the Proposed Acquisition (based on the Consideration of US$65,638,158) to the Company against the Group's latest audited NTA is 23.04%. Accordingly, as the amount at risk to the Company exceeds 5% of the Group's latest audited NTA, the Proposed Acquisition is subject to Shareholders' approval.

9.3. Current and On-going Interested Person Transactions

Save for the Proposed Acquisition, the Group has not entered into any transactions with the GMR Vendors, during the current financial year beginning 1 January 2018 and up to the Latest Practicable Date.

For the avoidance of doubt, the aggregate value of all interested person transactions entered into by the Group with associates of the GMR Vendors, during the current financial year beginning 1 January 2018 and up to the Latest Practicable Date is approximately US$3.49 million.

As at the Latest Practicable Date, the aggregate value of all interested person transactions entered into by the Group for the current financial year beginning 1 January 2018 is approximately US$178.12 million, inclusive of the Proposed Acquisition and other transactions with the GMR Vendors and their associates; or approximately US$108.99 million, excluding the Proposed Acquisition and other transactions with the GMR Vendors and their associates.

For the avoidance of doubt, as at the Latest Practicable Date, the Group has complied with the requirements under Rules 905 and 906 of the Listing Manual, in respect of the interested person transactions entered into by the Company during the current financial year beginning 1

[4] Please refer to Section 3.2 for more information on the relationship between the Company, GEMS and the GMR Vendors.
[5] As at the date of this Circular, the Group's latest available audited NTA is based on the Group's audited accounts as at 31 December 2017.

January 2018.

10. INTEREST OF DIRECTORS AND SUBSTANTIAL SHAREHOLDERS

10.1. Interests in the Shares

As at the Latest Practicable Date, the Company has an existing issued and paid-up share capital of 2,353,100,380 Shares. As at the Latest Practicable Date, the interests of Directors in the capital of the Company as recorded in the Register of Directors' Shareholdings are as follows:

	Direct Interest		Deemed Interest	
	No. of Shares	%	No. of Shares	%
Directors				
Mr. Lay Krisnan Cahya	-	-	-	-
Mr. Fuganto Widjaja[(1)]	-	-	-	-
Mr. Dwi Prasetyo Suseno	-	-	-	-
Mr. Mochtar Suhadi	-	-	-	-
Mr. Lim Yu Neng Paul[(2)]	-	-	320,000	0.0136%
Mr. Irwandy Arif	-	-	-	-
Mr. Lew Syn Pau	-	-	-	-
Mr. Djuangga Mangasi Mangunsong	-	-	-	-

Notes:

(1) Mr. Fuganto Widjaja is the son of Mr. Indra Widjaja and the nephew of Messrs Franky Oesman Widjaja and Muktar Widjaja. Messrs Indra Widjaja, Franky Oesman Widjaja and Muktar Widjaja are the ultimate controlling shareholders of the Company.

(2) Held through Citibank Nominees Singapore Pte Ltd and DBS Nominees Pte Ltd.

As at the Latest Practicable Date, the interests of the substantial shareholders in the capital of the Company as recorded in the Register of Substantial Shareholders are as follows:

Name of Substantial Shareholder	Direct Interest		Deemed Interest	
	No. of Shares	%	No. of Shares	%
DSS	2,044,145,469	86.87	-	-
PT Sinar Mas Tunggal [(1)]	-	-	2,044,145,469	86.87
PT Sinar Mas [(1)]	-	-	2,044,145,469	86.87
PT Sinar Mas Cakrawala [(1)]	-	-	2,044,145,469	86.87
PT Sinarindo Gerbangmas [(1)]	-	-	2,044,145,469	86.87
Franky Oesman Widjaja [(2)]	-	-	2,044,145,469	86.87
Muktar Widjaja [(2)]	-	-	2,044,145,469	86.87
Indra Widjaja [(2)]	-	-	2,044,145,469	86.87

Notes:

(1) PT Sinar Mas Tunggal is deemed interested in 2,044,145,469 shares held by DSS by virtue of its shareholding of no less than 20% of the voting shares in DSS. PT Sinar Mas is deemed interested in 2,044,145,469 shares held by DSS by virtue of its shareholding of no less than 20% of the voting shares in PT Sinar Mas Tunggal. PT Sinar Mas Cakrawala is deemed interested in 2,044,145,469 shares held by DSS by virtue of its shareholding of no less than 20% of the voting shares in PT Sinar Mas. PT Sinarindo Gerbangmas is deemed interested in 2,044,145,469 shares held by DSS by virtue of its shareholding of no less than 20% of the voting shares in PT Sinar Mas Cakrawala.

(2) Mr Franky Oesman Widjaja, Mr Muktar Widjaja and Mr Indra Widjaja are each deemed interested in 2,044,145,469 shares held by DSS by virtue of their individual shareholdings of no less than 20% of the voting shares in PT Sinarindo Gerbangmas.

10.2. Interest in the Proposed Acquisition

None of the Directors (other than in his capacity as a Director or Shareholder) or Controlling Shareholders of the Company (other than in its capacity as a Shareholder) has any interest, direct or indirect, in the Proposed Acquisition. For the avoidance of doubt, none of the Directors are related to GMR or acting as a nominee of GMR.

11. OPINION OF THE INDEPENDENT FINANCIAL ADVISER

ZICO Capital Pte. Ltd. has been appointed as the independent financial adviser ("**IFA**") in relation to the Proposed Acquisition to opine on whether the Proposed Acquisition is on normal commercial terms and is not prejudicial to the interests of the Company and its minority Shareholders. A copy of the IFA Letter dated 28 June 2018 to the Directors, containing in full the advice and opinion of the IFA, is reproduced and appended in Appendix 3 to this Circular. Shareholders are advised to read the IFA Letter carefully and in its entirety.

Taking into consideration the factors set out in the IFA Letter, the IFA is of the opinion that the Proposed Acquisition as an Interested Person Transaction is on normal commercial terms and is not prejudicial to the interests of the Company and its minority Shareholders.

12. STATEMENT FROM THE AUDIT COMMITTEE

Having reviewed, *inter alia*, the terms and rationale of the Proposed Acquisition, the financial effects thereof, as well as the advice of the IFA, the audit committee of the Company (comprising Messrs Lim Yu Neng Paul, Lay Krisnan Cahya and Lew Syn Pau) ("**Audit Committee**") concurs with the opinion of the IFA and are of the view that the Proposed Acquisition is on normal commercial terms and is not prejudicial to the interests of the Company and its minority Shareholders.

13. DIRECTORS' RECOMMENDATIONS

Having reviewed, *inter alia*, the terms and rationale of the Proposed Acquisition, the financial effects thereof, as well as the advice of the IFA, the Directors recommend that the Shareholders vote in favour of the Proposed Acquisition at the EGM to be convened.

14. EXTRAORDINARY GENERAL MEETING

The EGM, notice of which is set out in the Section titled "Notice of Extraordinary General Meeting" in this Circular, shall be held at Guild Room, NUSS The Graduate Club, Suntec City Guild House, 3 Temasek Boulevard (Tower 5) #02-401/402, Suntec City Mall, Singapore

038983 at 10.00 a.m. on 13 July 2018 (or any adjournment thereof). For the purpose of considering, and if thought fit, passing with or without modifications, the resolutions set out in the Notice of the EGM.

A Depositor shall not be entitled to attend and vote at the EGM unless he is shown to have Shares of the Company entered against his name in the Depository Register as at 72 hours before the time fixed for holding the EGM, as certified by CDP to the Company.

15. ACTION TO BE TAKEN BY THE SHAREHOLDERS

Shareholders who are unable to attend the EGM and wish to appoint a proxy to attend and vote at the EGM on their behalf, may complete, sign and return the Proxy Form attached to the Notice of EGM in accordance with the instructions printed thereon as soon as possible and in any event so as to reach the registered office of the Company at 20 Cecil Street #05-05 PLUS, Singapore 049705 not less than 72 hours before the time fixed for the holding of the EGM. The completion and return of the Proxy Form by a Shareholder will not prevent him from attending and voting at the EGM, if he wishes to do so, in place of his proxy.

16. ABSTENTION FROM VOTING

Pursuant to Rule 920(1)(b)(viii) of the Listing Manual, the interested person shall abstain, and should undertake to ensure that its associates will abstain, from voting on the resolution approving the Proposed Acquisition. As at the Latest Practicable Date, none of the GMR Group or its associates holds any voting shares in the Company. The GMR Vendors have undertaken that, in the event it or any of its associates holds voting shares in the Company, it and all of its associates shall abstain from voting on the resolution approving the Proposed Acquisition. Further, the GMR Vendors have undertaken to decline, and shall ensure that its associates decline, to accept appointment as proxies to vote and attend at the EGM in respect of the resolution approving the Proposed Acquisition for other Shareholders unless the Shareholder concerned shall have given specific instructions as to the manner in which his votes are to be cast at the EGM.

For the avoidance of doubt, DSS is entitled to vote on the Proposed Acquisition. As disclosed in the RTO Circular, if the Group proposes to enter into interested person transactions with GMR Singapore or its associates, to the extent that DSS is not interested in such transactions, DSS will be entitled to vote on such transactions. Apart from DSS' interest as a shareholder of the Company, DSS is **not an interested party** to the Proposed Acquisition because (a) the Proposed Acquisition is between the GMR Vendors and GEMS; and (b) the "interested person" under Chapter 9 of the Listing Manual in relation to the Proposed Acquisition is the GMR Vendors.

17. CONSENTS

17.1. IFA Consent

ZICO Capital Pte. Ltd, which prepared the IFA Letter, has given and has not before the date of this Circular withdrawn its written consent to the issue of this Circular with the inclusion of Appendix 3, its name and all references thereto in the form and context in which they appear in this Circular.

17.2. Salva Mining's consent

Salva Mining, which prepared the BSL Independent Qualified Person's Report, has given and has not before the date of this Circular withdrawn its written consent to the issue of this Circular with the inclusion of Appendices 4A and 4B, its name and all references thereto in the form and context in which they appear in this Circular.

18. DIRECTORS' RESPONSIBILITY STATEMENT

The Directors collectively and individually accept full responsibility for the accuracy of the information given in this Circular and confirm after making all reasonable enquiries that, to the best of their knowledge and belief, this Circular constitutes full and true disclosure of all material facts about the Proposed Acquisition and the Group, and the Directors are not aware of any facts the omission of which would make any statement in this Circular misleading.

Where information in this Circular has been extracted from published or otherwise publicly available sources or obtained from a named source, the sole responsibility of the Directors has been to ensure that such information has been accurately and correctly extracted from those sources, reflected or reproduced in this Circular in its proper form and context.

19. GMR VENDORS DIRECTORS' RESPONSIBILITY STATEMENT

The GMR Vendors Directors collectively and individually accept full responsibility for the accuracy of (a) the information in Sections 2, 3, 5 and 16, and Appendices 1 and 2 to this Circular to the extent that they relate to the GMR Vendors, the GMR Group and the Target Group as well as (b) any other information relating to the GMR Vendors, the GMR Group and the Target Group in this Circular (collectively, the "**GMR Disclosure**") and confirm after making all reasonable enquiries that, to the best of their knowledge and belief, the GMR Disclosure constitutes full and true disclosure of all material facts about the GMR Vendors and the Target Group for the purposes of the Proposed Acquisition, and the GMR Vendors Directors are not aware of any facts the omission of which would make any statement in this Circular misleading.

20. DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents are available for inspection during normal business hours at the registered office of the Company at 20 Cecil Street #05-05 PLUS, Singapore 049705 for a period of three months from the date of this Circular:

(a) Constitution of the Company;

(b) Sale and Purchase Agreement;

(c) Final Fairness Opinion, DSU Valuation Report and UNS Valuation Report;

(d) IFA Letter; and

(e) BSL Independent Qualified Person's Reports.

Yours faithfully,

For and on behalf of the Board of Directors of
GOLDEN ENERGY AND RESOURCES LIMITED

Mr. Fuganto Widjaja
Executive Director and Group CEO

1. BSL Coal Concession Area and Reserves of BSL

BSL is the holder of a mining concession pursuant to the Coal Contract of Work dated 15 August 1994 entered into between the BSL and PT Perusahaan Negara Tambang Batubara (as amended on 27 June 1999 and 14 November 2017) (the "**CCoW**") and the First Stage of Operation Production Activity Within the CCoW area pursuant to The Decree of The Ministry of Energy and Mineral Resources No. 718.K/30/DJB/2011 dated 31 March 2011, that is valid for 30 years commencing from 31 March 2011, in respect of coal concession areas located over an area of 23,300 hectares in Musi Rawas, Musi Rawas Utara and Musi Banyuasin Regencies, South Sumatra, Indonesia ("**BSL Coal Concession Area**"). The BSL Coal Concession Area consists of two sub-blocks, namely the north block ("**North Block**") and south block ("**South Block**").

The Company commissioned Salva Mining, who is an independent qualified person in accordance with the requirements of the Listing Manual, to prepare the BSL Independent Qualified Person's Reports on the coal resources and coal reserves of the BSL Coal Concession Area in accordance with the JORC Code and VALMIN Code. Each of the BSL Independent Qualified Person's Reports is prepared by an independent qualified person who meets the requirements in Rule 210(9)(b) of the Listing Manual.

North Block

Based on the early stage exploration in the North Block, three sub-blocks that have prospects of coal have been identified – Kapas River, Merjang and Meranti. As the North Block is in the early stage of exploration, there is no estimate on the resources as at 31 December 2017.

South Block

Based on the BSL Independent Qualified Person's Reports, exploration as at 31 December 2017 has been concentrated on the South Block, over an area of approximately 3,200 hectares. Four sub-blocks with prospects of coal have been identified in the South Block – Muara Lakitan, Batukucing, Belani and Ampalau. Coal resources and reserves have been delineated at Muara Lakitan, Batukucing and Belani. As at 31 December 2017[6], the estimated coal resources and reserves from the South Block are 393 million tonnes and 194.6 million tonnes, respectively.

Location

The North and South Blocks are located almost equidistant (200-250 kilometers by road) from the major cities of Sumatra Islands, namely Palembang and Bengkulu.

The following map illustrates the general location of the North and South Blocks:

[6] Please refer to the BSL Independent Qualified Person's Report (South Block) which is set out in Appendix 4A to this Circular. There is no resource drilling and resource estimate for the Ampalau sub-block. The BSL Independent Qualified Person's Report (South Block) covers the coal resources and coal reserves estimates for the Muara Lakitan, Belani and Batukucing sub-blocks only.

Source: BSL Independent Qualified Person's Report

Estimates of Coal Resources and Reserves

The following table summarises the estimated amount of measured, indicated and inferred coal resources and proved and probable coal reserves, within the South Block of the BSL Coal Concession Area as at 31 December 2017:

Concession	Coal Resources[7] (in million tonnes)			
	Measured	Indicated	Inferred	Total
Muara Lakitan	149	78	51	278
Batukucing	7	20	15	42
Belani	19	46	8	73
Total	175	144	74	393

Note: Individual totals may differ due to rounding
Source: BSL Independent Qualified Person's Report (South Block)

Concession	Coal Reserves[8] (in million tonnes)		
	Proved	Probable	Total
Muara Lakitan	109.8	31.3	141.1
Batukucing	1.7	11.5	13.1
Belani	18.8	21.6	40.4
Total	130.3	64.4	194.6

[7] Coal resources are inclusive of coal reserves. Please refer to the BSL Independent Qualified Person's Report (South Block) which is set out in Appendix 4A to this Circular.
[8] Please refer to the BSL Independent Qualified Person's Report (South Block) which is set out in Appendix 4A to this Circular.

Note: Individual totals may differ due to rounding
Source: BSL Independent Qualified Person's Report (South Block)

The following table sets out certain specifications of the coal reserves in the South Block of the BSL Coal Concession Area as at 31 December 2017:

Coal Specification	Muara Lakitan Block	Batukucing Block	Belani Block
Total Moisture (arb[(1)]%)	36.8	33.6	28.2
Inherent Moisture (adb[(2)]%)	20.9	9.9	19.5
Ash Content (adb%)	5.0	5.4	4.8
Total Sulfur (adb%)	0.30	0.45	0.29
Calorific Value (arbkcal/kg)	3,977	4,369	4,596

Source: BSL Independent Qualified Person's Report (South Block)
Notes:
(1) "arb" means as received basis.
(2) "adb" means air dried basis.

To the best of the GMR Vendors Directors' belief and knowledge, no material changes have occurred in respect of the coal resources and reserves within the BSL Coal Concession Area since the date of the BSL Independent Qualified Person's Reports.

Salva Mining has confirmed that the information presented in this Section 1 of Appendix 1 is accurate, balanced, complete and not inconsistent with the BSL Independent Qualified Person's Report it had prepared in respect of the North Block and South Block.

2. Production of BSL

Mining activities from the Belani block have commenced but have not reached commercial production, while the Batukucing and Muara Lakitan blocks are ready to be mined. As at September 2017, trial coal production from the Belani block has commenced. The Belani block is expected to commence commercial production in the second half of 2018, after the logistics and evacuation infrastructure facilities from pit to port are operational. Production from the Batukucing and Muara Lakitan blocks is expected to commence from 2019 onwards, subject to market conditions and approvals from the relevant authorities. To the best of the GMR Vendor's Directors' knowledge and belief, (a) all material regulatory approvals to commence production from the Belani Block have been obtained and (b) all material licences, permits and approvals with regard to further mining activities in the BSL Coal Concession Area have been obtained.

3. Valuation of the BSL Concession Area

Valuation approach for South Block

Salva Mining has assessed the value of the South Block on two approaches – income based (Net Present Value) and market based (Comparable Transactions) approaches.

The preferred value derived from the income based approach is within the acceptable range of the preferred value derived from comparable market transactions range. Salva Mining has used the average derived from these two approaches as its opinion on the preferred value of the

South Block. Salva Mining's opinion of the value of the South Block is based on certain assumptions and inputs. Salva Mining's opinion of the technical value and thus the valuation of the South Block takes into account the high and low cases and sensitivity of the valuation.

Valuation approach for North Block

As the North Block is in the early stage of exploration, there is no estimate on the coal resources as at 31 December 2017. Therefore, Salva Mining has assessed the value of the project on two approaches – geoscientific rating and market based (Comparable Transactions) approaches.

Salva Mining's opinion of the value of the North Block is based on certain assumptions and inputs. Salva Mining's opinion of the technical value and thus the valuation of the North Block takes into account the high and low cases and sensitivity of the valuation.

Valuation of North Block and South Block

Based on the BSL Independent Qualified Person's Reports which was prepared in accordance with the JORC Code and VALMIN Code, Salva Mining is of the opinion that:

(a) as at 31 December 2017, the project value of the South Block (on a 100% basis) is in the range of US$180 million to US$317 million, with a preferred value of US$248 million; and

(b) as at 31 December 2017, the project value of the North Block (on a 100% basis) is in the range of US$14.2 million to US$26.4 million, with a preferred value of US$20.3 million.

Accordingly, based on the BSL Independent Qualified Person's Reports, the aggregate preferred valuation of the BSL Coal Concession Area (comprising the North Block and South Block) (on a 100% basis) as at 31 December 2017 is US$268.3 million.

Please refer to the BSL Independent Qualified Person's Reports as set out in Appendices 4A and 4B to this Circular for further details including the methodologies and principal assumptions used in arriving at the above valuation in respect of the South Block and North Block respectively.

Salva Mining has confirmed that the information presented in this Section 3 of Appendix 1 is accurate, balanced, complete and not inconsistent with the BSL Independent Qualified Person's Report it had prepared in respect of the North Block and South Block.

4. Permits and Approvals

To the best of the GMR Vendor's Directors' knowledge and belief, all material licences, permits and approvals with regard to further mining activities in the BSL Coal Concession Area have been obtained.

A summary of the unaudited consolidated financial statements of the Target Group for the 12-months financial year ended 31 March 2016 ("**FY2016**"), 31 March 2017 ("**FY2017**") and 31 March 2018 ("**FY2018**"), are set out below ("**Target Group Financial Statements**"). The Target Group Financial Statements for FY2016, FY2017 and FY2018 are prepared based on: (i) the audited consolidated financial statements of DSU and its subsidiaries; and (ii) the audited financial statements of UNS, for the corresponding financial years.

The Target Group's Financial Statements have been prepared in accordance with generally accepted accounting principles in Indonesia. Some of the Target Group Financial Statements were prepared in Indonesian Rupiah ("**Rp**") and have been translated into United States Dollar ("**US$**") for the purposes of this Appendix 2 on the exchange rates set out in the following table:

	Rp/ US$	
	Average	**Closing**
FY2016	13,594	13,148
FY2017	13,298	13,326
FY2018	13,760	13,768

Source: Bloomberg L.P.[9]

The translation of the financial statements into US$ is purely for the illustration purposes and does not mean that the Rp amounts could have been, or could be, actually converted into US$ amounts at the rate stated, or at all, and *vice-versa.*

(A) Summary of Consolidated Income Statement

	FY2016* **(US$'000)**	**FY2017** **(US$'000)**	**FY2018** **(US$'000)**
General Operating Expenses	311	308	310
Operating Loss	(311)	(308)	(310)
Net Other Income (1)	448	224	41
Profit/(Loss) before Tax	137	(84)	(269)
Tax (Expense)/Credit	(6)	2	3
Profit/(Loss) after Tax	131	(82)	(266)

***** Following certain restatements and reclassifications

Note (1): "Net Other Income" includes the impact of the foreign exchange gain and interest on bank deposits, net of the miscellaneous expenses and foreign exchange losses.

The Target Group has not recorded any revenue because production has not commenced at the BSL Coal Concession Area. BSL acquired the BSL Coal Concession Area as a greenfield. Subsequent to the acquisition, BSL carried out exploration activities, acquired the land for the initial years of mining, secured the material licences and developed the mines ready for the production stage.

[9] Bloomberg L.P. has not consented to the exchange rates quoted under this section and thereby is not liable for these exchange rates. The Board has included the information in the proper form and context in this Circular and has not verified the accuracy of the information.

(B) Summary of Consolidated Balance Sheet

	31 March 2016*	31 March 2017	31 March 2018
	(US$'000)	(US$'000)	(US$'000)
Current Assets			
Cash and Cash Equivalent	296	671	373
Inventories	478	53	53
Trade Receivables	-	-	387
Other Receivables	1,085	676	777
	1,859	1,399	1,590
Non-Current Assets			
Fixed Assets	13,551	13,368	14,668
Other Receivables	13	19	2,781
Restricted Deposits	398	424	581
Mining Properties	62,289	68,135	78,900
Deferred Tax Assets	-	-	24
	76,251	81,946	96,954
Total Assets	**78,110**	**83,345**	**98,544**
Current Liabilities			
Other Payables	35,622	41,097	60,708
Tax Payables	188	182	202
	35,811	41,279	60,910
Non-Current Liabilities			
Loans and Borrowings	40,000	40,000	36,000
Other Payables	479	322	227
Deferred Tax Liabilities	2	2	-
	40,481	40,324	36,227
Net Assets	**1,818**	**1,742**	**1,407**
Shareholders' Equity			
Share Capital	242	242	242
Mandatory Convertible Bonds	6,368	6,368	6,368
Reserves	(4,792)	(4,868)	(5,203)
	1,818	**1,742**	**1,407**

***** Following certain restatements and reclassifications

Review of Operating Results

The Target Group's financial year ends on 31 March of each calendar year.

FY2016 vs FY2017

The Target Group did not generate any revenue in FY2016 and FY2017 as the operations are inactive for DSU, DSI and UNS, while BSL was still at the exploration phase in FY2017 and had not commenced commercial production and sales. Pre-production revenue from saleable coal produced during the exploration phase was deducted from capitalised costs comprising deferred exploration and development expenses.

General operating expenses decreased by approximately US$3,000 from US$311,000 in FY2016 to US$308,000 in FY2017, mainly due to lower depreciation charge of US$8,000, partially offset by an increase in withholding taxes and license fees.

Net other income decreased by US$224,000 from US$448,000 in FY2016 to US$224,000 in FY2017 mainly due to (a) loss on disposal of fixed assets of US$53,000; (b) an increase in net interest expense of approximately US$97,000; (c) decrease in (i) foreign exchange gain of US$41,000; and (ii) sundry receipt of US$20,000.

FY2017 vs FY2018

The Target Group did not generate any revenue in FY2017 and FY2018 as the operations are inactive for DSU, DSI and UNS, while BSL was at the exploration phase in FY2017 and in FY2018 and had not commenced commercial production and sales. Pre-production revenue from saleable coal produced during the exploration phase was deducted from capitalised costs comprising deferred exploration and development expenses.

General operating expenses increased by approximately US$2,000 from US$308,000 in FY2017 to US$310,000 in FY2018, mainly due to an increase in professional fees expenses of US$14,000 offset by decrease in (i) depreciation charge of approximately US$7,000, and (ii) taxes and license fees of US$5,000.

There was a net other income of US$224,000 in FY2017 compared to a net other income of US$41,000 in FY2018, mainly due to a decrease in net interest income of US$253,000; and the absence of the loss on disposal of fixed asset of US$65,000 in FY2018.

As a result of the above and after accounting for tax credit of US$3,000, the Target Group recorded a loss after tax of US$266,000 in FY2018 as compared to a loss after tax of US$82,000 in FY2017.

Review of financial position

As at 31 March 2016 vs as at 31 March 2017

As at 31 March 2017, the Target Group has current asset of US$1.40 million (31 March 2016: US$1.86 million) and current liabilities of US$41.28 million (31 March 2016: US$35.81 million). The Target Group's current liabilities comprise mainly of security deposit received, and advances received from customers of US$9.29 million (31 March 2016: US$33.90 million) and shareholder's loan of US$29.82 million (31 March 2016: nil). Resultant from the above, the Target Group reported net current liabilities positions of US$39.88 million (31 March 2016: US$33.95 million).

Current Assets

Current assets decreased by US$460,000 to US$1.40 million as at 31 March 2017 from US$1.86 million as at 31 March 2016, mainly due to decrease in (i) inventories of approximately US$425,000 as a result of sales during the period; and (ii) other receivables of US$409,000 from lower advances payments and prepayments; partially offset by increase in cash and cash equivalent of US$375,000 due to increase in other payables during the year as partially offset by decrease in advance from customers and decrease in security deposit received.

Non-Current Assets

Non-current assets increased by approximately US$5.69 million to US$81.95 million as at 31 March 2017, mainly due to increase in (i) mining properties of approximately US$5.85 million resultant from capitalisation of interest expense and manpower costs incurred during the year; and (ii) restricted deposits of US$26,000; and partially offset by a decrease in fixed assets of US$183,000 mainly as a result of depreciation charged during the year. Other receivables remain relatively stable for the period under review.

Current Liabilities

Current liabilities increased by US$5.47 million mainly due to increase in other payables of approximately US$5.47 million. The increase in other payables mainly due to higher accrued expenses and payables due to related parties and third parties, and partially offset by decrease in advances from customers and security deposit received.

Non-Current Liabilities

Non-current liabilities decreased by approximately US$157,000 due to decrease in other payables as a result of reduction in post-employment benefit obligation. Loans and borrowings and deferred tax liabilities remain relatively stable for the periods under review.

<u>As at 31 March 2017 vs as at 31 March 2018</u>

As at 31 March 2018, the Target Group has current asset of US$1.59 million (31 March 2017: US$1.40 million) and current liabilities of US$60.91 million (31 March 2017: US$41.28 million). The Target Group's current liabilities comprise mainly of security deposit received, and advances received from customers of US$19.09 million (31 March 2017: US$9.29 million) and shareholder's loan of US$29.82 million (31 March 2017: US$29.82 million). Resultant from the above, the Target Group reported net current liabilities positions of US$59.32 million (31 March 2017: US$39.88 million).

Current Assets

Current assets increased by approximately US$191,000 as at 31 March 2018 as compared to 31 March 2017, mainly due to an increase in trade and other receivables of approximately US$488,000 as a result of higher prepayments made and advance payment received, and partially offset by decrease in cash and cash equivalent of approximately US$298,000.

Non-Current Assets

Non-current assets increased by approximately US$15.01 million to US$96.95 million as at 31 March 2018, mainly due to the increase in (i) other receivables of US$2.76 million; (ii) increase in fixed assets of US$1.30 million mainly because of the land acquired during the year; (iii) increase in restricted

deposits of US$157,000; (iv) mining properties of US$10.76 million as a result of capitalization of consultancy charges, interest expenses and manpower costs during the year.

Current Liabilities

Current liabilities increased by US$19.63 million mainly due to increase in other payables by approximately US$19.61 million and tax payables by US$20,000 due to provision of withholding tax. Other payables increased mainly due to advances received from customers.

Non-Current Liabilities

Non-current liabilities as at 31 March 2018 decreased by approximately US$4.10 million mainly due to decrease in other payables of US$95,000 and loans and borrowings of US$4.00 million as compared to 31 March 2017. The reduction in loans and borrowings was the result of loan repayment to the bank.

28 June 2018

GOLDEN ENERGY AND RESOURCES LIMITED
20 Cecil Street #05-05
PLUS (formerly GSH Plaza)
Singapore 049705

Attention: The Independent Directors

THE PROPOSED ACQUISITION AS AN INTERESTED PERSON TRANSACTION OF (I) 100% SHAREHOLDING INTEREST IN PT DWIKARYA SEJATI UTAMA, PT DUTA SARANA INTERNUSA, PT BARASENTOSA LESTARI AND PT UNSOCO; AND (II) US$6,368,158 MANDATORY CONVERTIBLE BONDS

*Unless otherwise defined or the context otherwise requires, all capitalised terms used in this letter ("**IFA Letter**") shall have the same meanings as defined in the circular to shareholders of the Company dated 28 June 2018 (the "**Circular**").*

1. INTRODUCTION

On 12 May 2017, Golden Energy and Resources Limited (the "**Company**", together with its subsidiaries, the "**Group**") announced that its 66.9998%-owned subsidiary, PT Golden Energy Mines Tbk ("**GEMS**", together with its subsidiaries, the "**GEMS Group**"), entered into a conditional sale and purchase agreement ("**SPA**") with GMR Energy (Netherlands) B.V. ("**GMR Energy**") and GMR Infrastructure (Overseas) Limited ("**GMR Infrastructure**") (together, the "**GMR Vendors**") on the same date, pursuant to which the GEMS Group will acquire from the GMR Vendors:

(a) the Sale Shares (as defined herein) for an aggregate consideration of US$59,270,000 (the "**Sale Shares Acquisition**"); and

(b) the Mandatory Convertible Bonds (as defined herein) for an aggregate consideration of US$6,368,158 (the "**MCB Acquisition**"),

on such terms and conditions set out in the SPA (the "**Proposed Acquisition**").

Pursuant to the Proposed Acquisition, GEMS and PT GEMS Energy Indonesia (a 99.99%-owned subsidiary of the GEMS Group) (together, the "**Purchasers**") shall acquire from the GMR Vendors:

(a) 175 shares in the issued share capital of PT Barasentosa Lestari ("**BSL**"), representing 5% of the total issued and paid-up share capital of BSL, owned by GMR Infrastructure;

(b) 100,000 shares in the issued share capital of PT Unsoco ("**UNS**"), representing 100% of the total issued and paid-up share capital of UNS, owned 99% by GMR Energy and 1% by GMR Infrastructure;

(c) 10 shares in the issued share capital of PT Duta Sarana Internusa ("**DSI**"), representing 1% of the total issued and paid-up share capital of DSI, owned by GMR Energy; and

(d) 1,000 shares in the issued share capital of PT Dwikarya Sejati Utama ("**DSU**"), representing 100% of the total issued and paid-up share capital of DSU, owned 99.9% by GMR Energy and 0.1% by GMR Infrastructure,

(together, the "**Sale Shares**"). The entire effective shareholding interest in BSL is held by the GMR Vendors directly and through DSU, DSI and UNS (together with BSL, the "**Target Group**", and each a "**Target Group Company**").

In addition, the Purchasers shall acquire from the GMR Vendors all the mandatory convertible bonds issued by DSU and held by the GMR Vendors (the "**Mandatory Convertible Bonds**"), at the aggregate face value of US$6,368,158 and subject to the terms and conditions of the SPA. The acquisition of the Mandatory Convertible Bonds was negotiated as an integral part of the acquisition of the Sale Shares as the Company's shareholding interests in the Target Group would otherwise be diluted pursuant to the eventual conversion of the Mandatory Convertible Bonds by the GMR Vendors.

In view of the extended timeline, GEMS and the GMR Vendors had, on 29 December 2017, entered into a supplemental agreement to the SPA to extend the long stop date of the Proposed Acquisition ("**Long Stop Date**") to 31 March 2018. On 21 March 2018, GEMS and the GMR Vendors entered into a second supplemental agreement to the SPA to further extend the Long Stop Date to 30 June 2018. On 22 June 2018, GEMS and the GMR Vendors entered into a third supplemental agreement to further extend the Long Stop Date to 31 August 2018.

The GMR Vendors shall not be bound to transfer any Sale Shares or Mandatory Convertible Bonds, and the Purchasers shall not be bound to purchase any Sale Shares or Mandatory Convertible Bonds, unless the sale and purchase of all (and not some only) of the Sale Shares and the Mandatory Convertible Bonds is completed at the same time.

The Proposed Acquisition as an Interested Person Transaction

GMR Coal Resources Pte Ltd ("**GMR Singapore**"), which is a member of the GMR Group (as hereinafter defined), holds 30% of the total issued and paid-up share capital of GEMS. As disclosed in the Company's circular to shareholders dated 30 January 2015 in relation to the Company's acquisition of 66.9998% of the issued and paid-up share capital of GEMS, GMR Singapore is regarded as an "interested person" of the Company by virtue of its ownership of 30% of the entire issued share capital of GEMS, notwithstanding that GMR Singapore does not have any interest in the Company. Consequently, transactions between GMR Singapore or any of its associates and the Group will be regarded as "interested person transactions" and subject to the provisions of Chapter 9 of the Singapore Exchange Securities Trading Limited Listing Manual ("**Listing Manual**"). The GMR Vendors are wholly-owned subsidiaries of GMR Infrastructure Ltd ("**GMR**", and together with its subsidiaries, the "**GMR Group**"), which holds the entire interest in GMR Singapore directly and indirectly through GMR Infrastructure. As such, the GMR Vendors are each an associate of GMR Singapore and thus each an "interested person". Accordingly, the Proposed Acquisition is regarded as an "interested person transaction" under Chapter 9 of the Listing Manual ("**Interested Person Transaction**").

Under Chapter 9 of the Listing Manual, Shareholders' approval is required for an interested person transaction of a value equal to, or exceeding, 5% of the Group's latest audited NTA. Pursuant to Rule 909(1) of the Listing Manual, the value of the transaction (being the amount at risk to the issuer), is the issuer's effective interest in that transaction. As GEMS is a 66.9998% owned subsidiary of the Company, the amount at risk to the Company in the Proposed Acquisition is US$43,977,435. However, as the financial performance, assets and liabilities of the Target Group will be entirely consolidated with the Company's consolidated financial statements, the Company believes that using the Consideration of US$65,638,158 would be a better reflection of the amount at risk of the Proposed Acquisition to the Company. As such, based on the Group's latest audited NTA of US$284.89 million as at 31 December 2017, the amount at risk of the Proposed Acquisition to the Company against the Group's latest audited NTA is 23.04%. Accordingly, the Proposed Acquisition is subject to Shareholders' approval.

ZICO Capital Pte. Ltd. ("**ZICO Capital**") has been appointed by the Company as the independent financial adviser ("**IFA**") to advise the directors of the Company who are considered independent in respect of the Proposed Acquisition ("**Independent Directors**"), for the purpose of making their recommendation to the Company's shareholders ("**Shareholders**") in respect of the Proposed Acquisition as an Interested Person Transaction.

This IFA letter ("**IFA Letter**") is addressed to such Independent Directors, to provide an opinion on whether the Proposed Acquisition is on normal commercial terms and not prejudicial to the interests of the Company and its minority Shareholders ("**Minority Shareholders**"). This IFA Letter forms part of the Circular to be despatched to Shareholders in relation to the Proposed Acquisition.

2. TERMS OF REFERENCE

ZICO Capital has been appointed as the IFA to advise the Independent Directors in respect of the Proposed Acquisition as an Interested Person Transaction.

We have confined our evaluation strictly and solely on the financial terms of the Proposed Acquisition as an Interested Person Transaction. Our terms of reference do not require us to evaluate or comment on the rationale, legal and commercial risks and/or merits (if any) of the Proposed Acquisition or on the future financial performance or prospects of the Company and its subsidiaries and we have not made such evaluations or comments. Such evaluations or comments shall remain the sole responsibility of the directors ("**Directors**") and the management (the "**Management**") of the Company although we may draw upon their views or make such comments in respect thereof (to the extent deemed necessary or appropriate by us) in arriving at our recommendation as set out in this IFA Letter.

We are not and were not involved or responsible, in any aspect, in the negotiations pertaining to the Proposed Acquisition, nor were we involved in the deliberations leading up to the decision on the part of the Directors to propose the Proposed Acquisition, and we do not, by this IFA Letter, warrant the merits of the Proposed Acquisition other than to express an opinion on whether the financial terms of the Proposed Acquisition, as an Interested Person Transaction, are normal commercial terms and are not prejudicial to the interests of the Company and its Minority Shareholders.

In the course of our evaluation of the financial terms of the Proposed Acquisition, we have held discussions with the Directors and the Management. We have also examined publicly available information collated by us as well as information, both written and verbal, provided to us by the Directors and the Management, including information contained in the Circular. We have relied on, and assumed without independent verification, the accuracy and completeness of such information, whether written or verbal, and accordingly cannot and do not make any warranty or representation, express or implied, in respect of, and do not accept any responsibility for the accuracy, completeness or adequacy of, such information or representations.

We have relied upon the assurances from the Directors and the Management (including those who may have delegated detailed supervision of the Circular), who have accepted full responsibility for the accuracy and completeness of the information provided to us, that, to the best of their knowledge and belief, they have taken reasonable care to ensure that the facts stated and opinions expressed by them or the Company in the Circular are fair and accurate in all material aspects. The Directors and the Management have confirmed to us that, to the best of their knowledge and belief, there is no other information or fact, the omission of which would cause any statement in the Circular in respect of the Group, the Target Group, and the Proposed Acquisition to be inaccurate, incomplete or misleading in any material respect. Whilst care has been exercised in reviewing the information upon which we have relied, we have not independently verified such information but nevertheless have made such enquiry and judgement as we have deemed necessary and have found no reason to doubt the accuracy or reliability of the information upon which we have relied.

For the purposes of assessing the financial terms of the Proposed Acquisition and reaching our conclusions thereon, we have not relied upon any financial projections or forecasts in respect of the Company or the Group or the Target Group. We will not be required to express, and we do not express, any view on the growth prospects and earnings potential of the Company or the Group in connection with our opinion in this IFA Letter.

In connection with the Proposed Acquisition, the Company commissioned independent valuer, Salva Mining Pty Ltd ("**Salva Mining**"), to prepare an independent qualified person's report on the BSL Coal Concession Area which is the primary asset of the Target Group. The reports which divide the BSL Coal Concession Area into two sub-blocks, namely the north block ("**North Block**") and south block ("**South Block**"), set out, amongst others, the valuation of the concession and details of the reserves and resources ("**IQPRs**"). The reports for the South Block ("**South Block IQPR**") and the North Block ("**North Block IQPR**") containing the valuation of the concession and the reserves and resources issued on 14 February 2018 are set out in Appendices 4A and 4B to the Circular respectively. We have placed sole reliance thereon for the valuation and information contained in the IQPRs. We are not involved in the preparation of, and assume no responsibility for the IQPRs. We have not made any independent verification of the contents thereof. Accordingly, no representation or warranty, express or implied, is made and no responsibility is accepted by us concerning the accuracy, completeness or adequacy of such information.

We note that GEMS commissioned independent business appraiser, KJPP Jennywati, Kusnanto & Rekan, to prepare a fairness opinion report on the Proposed Acquisition. This report was announced by GEMS on the Indonesia Stock Exchange ("**IDX**") on 16 May 2017 and announced by the Company on SGXNET on 22 June 2018. GEMS is a company listed on the IDX. We have not made any independent verification of the contents of this report and accordingly, no representation or warranty, express or implied, is made and no responsibility is accepted by us concerning the accuracy, completeness or adequacy of the information and opinions set out therein. For avoidance of doubt, the aforesaid report was issued in Indonesia and solely for the purpose of GEMS and its shareholders, not that of the Minority Shareholders of the Company.

Our recommendations are based upon market, economic, industry and other conditions prevailing, as well as information made available to us, as at 19 June 2018 (the "**Latest Practicable Date**"). Such conditions and information may change significantly over a short period of time. We assume no responsibility to update, revise or reaffirm our recommendations in light of any subsequent developments after the Latest Practicable Date that may affect our recommendations contained therein. Shareholders should take note of any announcements relevant to their consideration of the Proposed Acquisition as an Interested Person Transaction, which may be released after the Latest Practicable Date.

In rendering our advice and providing our recommendation, we did not have regard to the specific investment objectives, financial situation, tax position, risk profiles or unique needs and constraints of any Shareholder. We recommend that any Shareholder who may require specific advice in relation to his investment objective(s) or portfolio(s) should consult his legal, financial, tax or other professional advisers immediately.

The Company has been advised by its own legal advisers in the preparation of the Circular (other than this IFA Letter). We have had no role or involvement and have not provided any advice (financial or otherwise) whatsoever in the preparation, review and verification of the Circular (other than this IFA Letter) and our responsibility is as set out above in relation to this IFA Letter. Accordingly, we take no responsibility for, and express no views, whether expressed or implied, on the contents of the Circular (except for this IFA Letter).

We have prepared this IFA Letter pursuant to Rule 921(4)(a) of the Listing Manual as well as for the use by the Independent Directors in connection with their consideration of the Proposed Acquisition as an Interested Person Transaction, but any recommendations made by the Independent Directors in respect of the Proposed Acquisition shall remain their sole responsibility.

Whilst a copy of this IFA Letter may be reproduced in the Circular, neither the Company, the Directors nor any other persons may reproduce, disseminate or quote this IFA Letter (or any part thereof) for any purposes (other than for the consideration of the Proposed Acquisition as an Interested Person Transaction) at any time and in any manner without the prior written consent of ZICO Capital. Our opinion in relation to the Proposed Acquisition as an Interested Person Transaction should be considered in the context of the entirety of this IFA Letter and the Circular.

3. INFORMATION ON THE GMR VENDORS AND THE TARGET GROUP

3.1 Information on the GMR Vendors

GMR Energy is an investment holding company incorporated in the Netherlands, with its registered office at WTC Schiphol Airport, D Tower, 11th floor, Schiphol Boulevard 359, 1118 BJ Schiphol, Amsterdam, the Netherlands.

GMR Infrastructure is an investment holding company incorporated in Mauritius, with its registered office at 6th floor, Tower A, 1 Cybercity, Ebene, Republic of Mauritius.

The GMR Vendors are directly or indirectly held by GMR, an infrastructure development company listed on the Bombay Stock Exchange and the National Stock Exchange in India.

Please refer to Section 3 of the Circular for further details on the GMR Vendors and their relationship to the Company.

3.2 Information on the Target Group

(a) BSL

BSL, a limited liability company incorporated under the laws of Indonesia, is principally involved in coal mining and coal trading. BSL is the holder of a mining concession pursuant to the Coal Contract of Work in respect of coal concession areas located over an area of 23,300 hectares in Musi Rawas, Musi Rawas Utara and Musi Banyuasin Regencies, South Sumatra, Indonesia ("**BSL Coal Concession Area**"). Please refer to Appendices 1, 4A and 4B to the Circular for more information on the BSL Coal Concession Area.

(b) UNS

UNS is a limited liability company incorporated under the laws of Indonesia, to engage in the business of management consulting. It is, however, inactive as at the Latest Practicable Date.

(c) DSI

DSI is a limited liability company incorporated under the laws of Indonesia, to engage in the business of management consulting. It is, however, inactive as at the Latest Practicable Date.

(d) DSU

DSU is a limited liability company incorporated under the laws of Indonesia, to engage in the business of management consulting. It is, however, inactive as at the Latest Practicable Date.

Please refer to Sections 2 and 4.6 of the Circular for further details on the Target Group (including its shareholding structure upon completion of the Proposed Acquisition).

4. SALIENT TERMS OF THE PROPOSED ACQUISITION

4.1 Consideration

The aggregate consideration for the Proposed Acquisition is US$65,638,158 ("**Consideration**"), comprising US$59,270,000 as consideration for the Sales Shares ("**Sales Shares Consideration**") and US$6,368,158 as consideration for the Mandatory Convertible Bonds ("**MCB Consideration**").

The Consideration was arrived at on a willing-buyer and willing-seller basis, after the Company had taken into consideration, *inter alia*, the following factors:

(a) the face value of the Mandatory Convertible Bonds;

(b) the prospects of BSL;

(c) the current market prices for coal of comparable quality;

(d) the audited financial results of BSL for the 9-month financial period ended 31 December 2016;

(e) draft fairness opinion prepared by Kantor Jasa Penilai Publik ("**KJPP**") Jennywati, Kusnanto & Rekan on the fair market value of the Sale Shares commissioned by GEMS; and

(f) the independent qualified person's reports on the North Block and the South Block of the BSL Coal Concession Area by Salva Mining with an effective date of 1 April 2017, dated 7 April 2017.

4.2 Terms of Settlement of the Consideration

The Consideration will be satisfied by in the following manner:

(a) an amount of US$8,000,000, to be paid by GEMS to the GMR Vendors no later than five business days from the date of the SPA. As at the Latest Practicable Date, this amount has been paid;

(b) an amount of US$15,790,000, to be paid by GEMS to the GMR Vendors no later than five business days following issuance of the clearance by the Singapore Exchange Securities Trading Limited ("**SGX-ST**") referred to in Section 4.3(i) of the Circular. As at the date of this IFA Letter, this amount has been paid; and

(c) the remaining amount of US$41,848,158, comprising (i) US$35,480,000 (being the balance of the Sale Shares Consideration); and (ii) US$6,368,158 (being the full amount of the MCB Consideration), to be paid by GEMS to the GMR Vendors on the Completion Date.

In the event the SPA is terminated, any Consideration already paid by GEMS to the GMR Vendors as at the date of such termination shall at all times be refunded to GEMS within five (5) business days of such termination. Please refer to Section 4.2.6 of the Circular for further details.

4.3 Conditions Precedent

The completion of the Proposed Acquisition is conditional upon the satisfaction or waiver of conditions precedent set out in the SPA ("**Conditions Precedent**"). Please refer to Section 4.3 of the Circular for details of the Conditions Precedent.

5. EVALUATION OF THE PROPOSED ACQUISITION

In our evaluation of the Proposed Acquisition, we have given due consideration to, *inter alia*, the following key factors:

(a) the rationale for the Proposed Acquisition;

(b) the financial performance and position of the Target Group;

(c) the assessment of the Consideration;

(d) the financial effects of the Proposed Acquisition; and

(e) other relevant considerations.

5.1 Rationale for the Proposed Acquisition

It is not within our terms of reference to comment or express an opinion on the merits of the Proposed Acquisition or the future prospects of the Group after the Proposed Acquisition. Nevertheless, we have extracted the Company's rationale for the Proposed Acquisition as set out in Section 4.7 of the Circular and reproduced them below:

"The Proposed Acquisition is in line with the Group's strategic plans to expand its business operations and increase its coal reserves and production levels, thereby bringing additional value to the Company and its Shareholders. The Proposed Acquisition will provide the Company access to and control over the coal concession and coal deposits in the coal mining license area of BSL, the description of which are set out in Appendix 1 to this Circular. This acquisition would increase the Company's quantity of high calorific value coal resources available for production. In April 2016, President Joko Widodo of Indonesia announced the moratorium on new permits for, amongst others, mining activities, whereby the Indonesia Government will cease issuing new permits or licenses to palm oil and mining companies. In view of the said moratorium, the Company desires to increase its coal reserves through acquisition exercises to sustain its mining operations as harvesting and selling the existing coal reserves would eventually deplete its coal reserves.

The MCB Acquisition was negotiated as an integral part of the Sale Shares Acquisition."

5.2 Financial performance and condition of the Target Group

A summary of the unaudited consolidated financial statements of the Target Group for the financial year ended 31 March ("**FY**") 2016, FY2017 and FY2018 are extracted from the Circular and set out below. The unaudited consolidated financial statements of the Target Group for FY2016, FY2017 and FY2018 have been prepared based on (i) the audited consolidated financial statements of DSU and its subsidiaries ("**DSU Audited Financial Statements**"); and (ii) the audited financial statements of UNS ("**UNS Audited Financial Statements**").

The DSU Audited Financial Statements and the UNS Audited Financial Statements have been prepared by KAP Gani Sigiro & Handayani (a member of Grant Thornton Indonesia) in accordance with generally accepted accounting principles in Indonesia. The UNS Audited Financial Statement was prepared in Indonesian Rupiah ("**Rp**") and have been translated into United States Dollar ("**US$**"). Please refer to Appendix 2 to the Circular for the exchange rates used for the translation from Rp to US$.

Review of Operating Results

(US$'000)	FY2016	FY2017	FY2018
General Operating Expenses	311	308	310
Operating Loss	(311)	(308)	(310)
Net Other Income	448	224	41
Profit/(Loss) before Tax	137	(84)	(269)
Tax (Expense)/Credit	(6)	2	3
Profit/(Loss) after Tax	131	(82)	(266)

We note that the Target Group did not generate any revenue for the three financial years presented above as DSU, DSI and UNS were inactive, while BSL was at the exploration phase and had not commenced commercial production and sales. Pre-commercial production revenue from the sale of coal produced during the exploration phase was deducted from capitalized costs (comprising mainly deferred exploration and development expenses). General operating expenses relates mainly to depreciation charges of fixed assets, while net other income relates mainly to net foreign exchange gain and interest income on bank deposits, net of interest expenses and miscellaneous expenses.

Review of Financial Position

(US$'000)	As at 31 March 2016	As at 31 March 2017	As at 31 March 2018
Current Assets			
Cash and Cash Equivalents	296	670	373
Inventories	478	53	53
Trade Receivables	-	-	387
Other Receivables	1,085	676	777
	1,859	1,399	1,590
Non-Current Assets			
Fixed Assets	13,551	13,368	14,668
Other Receivables	13	19	2,781
Restricted Deposits	398	424	581
Mining Properties	62,289	68,135	78,900
Deferred Tax Assets	-	-	24
	76,251	81,946	96,954
Total Assets	**78,110**	**83,345**	**98,544**
Current Liabilities			
Other Payables	35,622	41,097	60,708
Tax Payables	189	182	202
	35,811	41,279	60,910

Non-Current Liabilities			
Loans and Borrowings	40,000	40,000	36,000
Other Payables	479	322	227
Deferred Tax Liabilities	2	2	-
	40,481	40,324	36,227
Net Assets	**1,818**	**1,742**	**1,407**
Shareholders' Equity			
Share Capital	242	242	242
Mandatory Convertible Bonds	6,368	6,368	6,368
Reserves	(4,792)	(4,868)	(5,203)
	1,818	1,742	1,407

We wish to highlight the following:

(a) Negative working capital

The Target Group had negative working capital as at 31 March 2016, 2017 and 2018, respectively, as it has not commenced commercial production and therefore, no revenue was generated. The Target Group relied mainly on the Shareholder's Loan (as defined below), advances received from customers and the Deposit (as defined below) to fund its operating expenses and exploration expenditures.

(b) Non-current assets

Non-current assets of US$96.95 million as at 31 March 2018 comprised mainly fixed assets of US$14.67 million, other receivables of US$2.78 million and mining properties of US$78.9 million. Fixed assets comprised mainly office equipment, and cost incurred for land compensation, buildings and road in preparation for the mining operations. Other receivables relates to refundable deposits made to third parties. Mining properties relates to deferred exploration and development expenditures, which included but were not limited to, general investigation expenses, manpower cost, consultation cost, and interest cost incurred in relation to the operations of the BSL Coal Concession Area during the exploration phase. As such, the amount recorded for mining properties as at 31 March 2018 is not reflective of the commercial value of the BSL Coal Concession Area, in respect of the coal reserves and resources. Such mining properties are classified as intangible assets in accordance with IFRS 6 - Exploration for and Evaluation of Mineral Resources.

(c) Current liabilities

Current liabilities of US$60.91 million as at 31 March 2018 comprised mainly the loan from GMR Energy of approximately US$29.82 million ("**Shareholder's Loan**"), an outstanding deposit of approximately US$7.02 million from an unrelated third party ("**Deposit**"), accrued expenses of approximately US$2.58 million and advances from customers of approximately US$19.09 million.

We note that pursuant to the Conditions Precedent set out in Section 4.3 of the Circular, the GMR Vendors have undertaken to ensure that the Shareholder's Loan would be restructured to become interest-free and payable within a period of four years from Completion, and the repayment will be subject to availability of surplus cash flow of BSL after deducting operating expenses. The Deposit relates to a non-interest bearing deposit received pursuant to an agreement entered into between DSI and a potential buyer for the potential sale of a 50% or

more ownership interest in BSL. We understand from the Management that this agreement had been terminated and the Deposit would be repayable by DSI to the potential buyer by 11 May 2018 ("**Due Date**"). As at the Latest Practicable Date, the Management advised that the Due Date has been extended to 31 December 2018.

(d) Non-current liabilities

Non-current liabilities of US$36.23 million as at 31 March 2018 comprised mainly the bank loan of US$36.0 million from ICICI Bank Limited ("**ICICI Loan**"). We note that pursuant to the Conditions Precedent set out in Section 4.3 of the Circular, the GMR Vendors have undertaken to ensure that the facility agreement between ICICI Bank Limited ("**ICICI**") and BSL in respect of the ICICI Loan will be duly restructured on terms largely comparable to the current terms, provided that BSL arranges or provides the necessary security for the ICICI Loan as requested by ICICI for accepting the change in ownership of BSL from the GMR Vendors to GEMS. Please refer to Section 4.3(d) of the Circular for the key terms of the ICICI Loan, including but not limited to the security provided by BSL to ICICI.

(e) Net tangible liability position

The Target Group is in a net tangible liability position of US$77.49 million as at 31 March 2018, after taking into consideration that the full amount of US$78.90 million of mining properties which relates to deferred exploration and development expenditures, is classified as intangible assets under IFRS 6 – Exploration for and Evaluation of Mineral Resources.

(f) Gearing

The Target Group has a gearing ratio of 51.66 times as at 31 March 2018, based on total debts comprising the Shareholder's Loan, the Deposit and the ICICI Loan. Assuming that the Shareholder's Loan (which would be restructured to become interest-free and payable within a period of four years from Completion, and the repayment will be subject to availability of surplus cash flow of BSL after deducting operating expenses) is excluded, the gearing ratio will decrease to 30.51 times.

Please refer to Appendix 2 to the Circular for further details of the financial analyses of the Target Group for FY2016, FY2017 and FY2018.

5.3 Assessment of the Consideration

In assessing the Consideration, we have considered the following:

(a) book value of the Target Group;

(b) independent professional valuation by Salva Mining; and

(c) comparison with selected listed companies whose businesses are broadly comparable to the Target Group.

5.3.1 Book value of the Target Group

As at 31 March 2018, the Target Group's net asset value ("**NAV**") was approximately US$1.41 million and would be in a net tangible liability ("**NTL**") position of US$77.49 million after deducting the full amount of US$78.90 million recorded as mining properties which is classified as intangible assets under IFRS 6 – Exploration for and Evaluation of Mineral Resources.

We note that the mining properties, which relates to deferred exploration and development expenditures, recorded on the unaudited consolidated financial statements of the Target Group

reflects only the cost incurred in relation to the pre-production operations of the BSL Coal Concession Area, and did not take into consideration any commercial value of the BSL Coal Concession Area, in respect of the coal reserves and resources.

Accordingly, such NAV or net tangible asset value may not serve as a meaningful assessment metric.

A price-earnings ratio analysis is also not meaningful as the Target Group was in a loss position and had not yet commenced commercial production and sales for and during the latest completed financial year, being FY2018.

We have considered whether there are any factors which have not been otherwise disclosed in the financial statements of the Target Group Companies that are likely to impact the NAV and/or NTL of the Target Group as at 31 March 2018. In this regard, the Directors and the Management have confirmed to us that as at the Latest Practicable Date, to the best of their knowledge and belief:

(a) there are no material changes to the Target Group's business operations since 1 April 2018 and up to the Latest Practicable Date, which would result in a material impact on the overall financial performance of the Target Group;

(b) there is no material difference between the realisable value of the Target Group's assets and their respective book values as at 31 March 2018, which would result in a material impact on the NAV and/or the NTL of the Target Group;

(c) there are no liabilities which values would be materially different from those recorded in the audited statement of financial position of each of the Target Group Company as at 31 March 2018;

(d) there are no other contingent liabilities, bad or doubtful debts or material events which are likely to have a material impact on the NAV and/or NTL of the Target Group;

(e) there are no litigation, claims or proceedings pending or threatened against each of the Target Group Company or any fact likely to give rise to any proceedings which might materially and adversely affect the financial position of the Target Group;

(f) there are no intangible assets which ought to be disclosed in the audited statement of financial position of each of the Target Group Company as at 31 March 2018 in accordance with the generally accepted accounting principles in Indonesia and which have not been disclosed and where such intangible assets would have had a material impact on the overall financial position of the Target Group; and

(g) there are no material acquisitions or disposals of assets by each of the Target Group Company since 1 April 2018 and up to the Latest Practicable Date, and each of the Target Group Company does not have any plans for any impending material acquisitions or disposals of assets, conversion of the use of its material assets or material change in the nature of the business of each of the Target Group Company.

5.3.2 Independent professional valuation by Salva Mining

The Directors commissioned Salva Mining to undertake an independent valuation of the BSL Coal Concession Area, being the primary asset of the Target Group.

The IQPRs dated 14 February 2018, which were prepared in accordance with JORC Code 2012, state that the BSL Coal Concession Area consists of two sub-blocks, namely North and South Blocks, covering an aggregate area of 23,300 hectares. Exploration to-date has been concentrated on the South Block, with exploration activities over an area of approximately 3,200 hectares. The North Block has not been drilled extensively, and as such no resources or reserves were reported

in respect thereof in the North Block IQPR. Based on the South Block IQPR, the measured and indicated resources and proved and probable reserves of the South Block are approximately 319.0 and 194.6 million tonnes, respectively.

Based on the South Block IQPR, the calorific value of the coal reserves ranges between 3,977 and 4,596 arb kcal/kg, while the measured and indicated coal resources has calorific value of 5,055 adb kcal/kg and 5,236 adb kcal/kg, respectively. We note that local mining contractors would be engaged by the Target Group for the mining activities and the total capital cost for the South Block is estimated to be approximately US$29.05 million, and relates mainly to land compensation, mine infrastructure, and upgrading of road and port facilities. Please refer to Appendices 4A and 4B to the Circular for further information on the BSL Coal Concession Area, including *inter alia*, the break-even stripping ratio, and the various permits and approvals required for the mining activities.

The independent valuation, which was prepared in accordance with the VALMIN Code 2015, has placed the preferred value of the BSL Coal Concession Area as of 31 December 2017 at US$268.3 million. This comprises a preferred value of US$248.0 million[1] and US$20.3 million[2] for the South Block and North Block, respectively.

The implied enterprise value of the Target Group is **US$138.11 million**, based on the (i) Consideration of US$65.64 million; (ii) total debts (comprising the Shareholder's Loan, the Deposit and the ICICI Loan) of approximately US$72.84 million ("**Total Debts**"); and less (iii) cash and cash equivalents of approximately US$0.37 million as at 31 March 2018. This represents approximately **51.48% of the preferred value** of the BSL Coal Concession Area as ascribed by Salva Mining in the IQPRs.

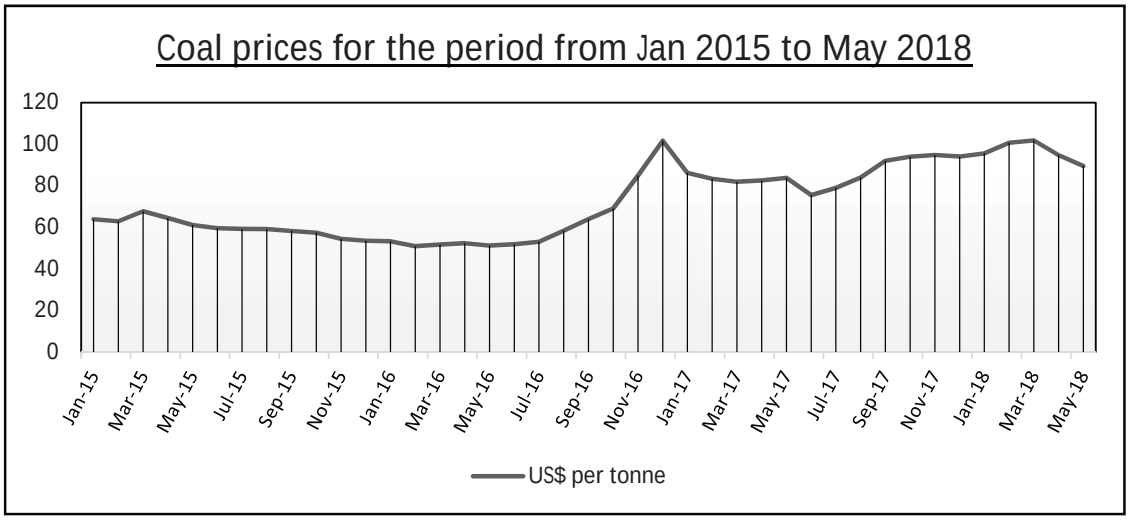
To the best of the belief and knowledge of the GMR Vendor's Directors, no material changes have occurred in respect of the coal resources and reserves of the BSL Coal Concession Area since the date of the IQPRs issued by Salva Mining.

Historical prices for the period three years preceding and up to the Latest Practicable Date

Coal is a commodity and coal prices tend to be generally volatile. We have examined the historical prices for coal over the last three years up to the Latest Practicable Date based on the Indonesian Government's monthly coal benchmark prices (also known as Harga Batubara Acuan or HBA). We note that HBA is a thermal coal price reference developed by Indonesia's Ministry of Energy and Mineral Resources comprising of equal weightage on four coal price indices, namely the Platts Kalimantan, Argus-Indonesia Coal Index, Newcastle Export Index and globalCOAL Newcastle Index. We would like to highlight that the calorific values of the coal reported in the South Block IQPR are different from those used in the determination of the HBA prices. Hence, the presentation of the historical HBA coal prices is for illustrative purposes only and should not be construed as a representation of the actual prices for which the Target Group could sell its coal.

[1] Valuation is derived based on the average of the income based approach and the market based approach. Please refer to Appendix 4A to the Circular for further information on the valuation approaches of the South Block.

[2] Valuation is derived based on the average of the market based approach and geoscientific rating method. Please refer to Appendix 4B to the Circular for further information on the valuation approaches of the North Block.



Source: Bloomberg L.P.

We note that coal prices have generally trended downwards from US$63.84/t to US$51.81/t through the period from January 2015 to June 2016 due to a decline in worldwide demand for coal. Coal prices trended up from July 2016 and peaked in December 2016, and subsequently have remained at higher price levels than in the previous 2 years.

Shareholders should note that coal prices fluctuate beyond the control of individual firms and are driven by market forces including factors such as global supply and demand dynamics, alternate sources of energy, government regulations and environmental and energy policies, which play a material role in determining coal prices. Prices may also be affected by macro-economic factors such as expectations of future inflation, interest rates, global economic growth and other factors.

We have not made our own assessment on the future coal price trends. For the purposes of our evaluation, we have relied on the IQPRs and the values ascribed in the IQPRs, and have not taken into account future coal price trends. Shareholders should note that there is no assurance that coal prices will maintain at current levels or if the forecast prices used in the IQPRs will materialise. Any changes in coal prices will have a significant impact on the Target Group's profitability and the fair market value of the BSL Coal Concession Area accordingly. For information on the coal price forecast as considered by Salva Mining, please refer to Appendix 4A to the Circular.

5.3.3 Comparison of valuation ratios of selected listed companies whose businesses are broadly comparable to the Target Group

For the purpose of assessing the Consideration, we have referred to the valuation statistics of selected companies listed in Singapore or Indonesia, whose businesses are broadly comparable to the coal mining and exploration business of the Target Group ("**Comparable Companies**"). We have had discussions with the Directors and the Management about the suitability and reasonableness of these Comparable Companies as a basis for comparison with the Target Group.

Relevant information has been extracted from Bloomberg L.P., publicly available annual reports and/or public announcements of the Comparable Companies. We make no representations or warranties, expressed or implied, as to the accuracy or completeness of such information. The accounting policies of the Comparable Companies with respect to the values for which the assets, revenue or cost are recorded may differ from that of the Group.

We wish to highlight that the list of Comparable Companies is not exhaustive. Furthermore, the Comparable Companies may differ from the Target Group in terms of, *inter alia*, composition of business activities, asset base, size of operations, geographical spread, clientele base, track record, operating and financial leverage, risk profile, accounting policies, future prospects, coal quality, geological structure of the coal seams, proximity to relevant infrastructures and other relevant criteria. We also wish to highlight that, unlike the Target Group, the Comparable Companies are currently in commercial production. As such, any comparison made is necessarily limited and merely serves as an illustrative guide.

The following is a brief description of the Comparable Companies:

Comparable Companies listed in Singapore ("Singapore Comparable Companies")

Companies	Business Activity Description	Financial Year Ended
Geo Energy Resources Limited ("**Geo Energy**")	Geo Energy primarily operates as a coal producer in Indonesia. It owns and operates four mining concessions in Kalimantan through its wholly-owned subsidiaries.	31 December 2017
BlackGold Natural Resources Limited ("**BlackGold**")	BlackGold operates as a coal mining company in Indonesia. It focuses on supplying coal to power plants located in Riau province, Sumatra. The company holds interest in PT Samantaka Batubara concession.	31 December 2017

Comparable Companies listed in Indonesia ("Indonesia Comparable Companies")

Companies	Business Activity Description	Financial Year Ended
PT Atlas Resources Tbk ("**Atlas Resources**")	Atlas Resources operates coal mines in East Kalimantan and South Sumatera regions which offer low to high calorific value coal. It also provide roads and port services to support coal and mining transportation and logistics, and other activities related to the coal mining operations.	31 December 2017
PT Baramulti Suksessarana Tbk ("**Baramulti Suksessarana**")	Baramulti Suksesssarana engages in coal trading and coal mining activities through its subsidiaries, and operates mines in East Kalimantan and South Kalimantan.	31 December 2017
PT Golden Eagle Energy Tbk ("**Golden Eagle Energy**")	Golden Eagle Energy operates coal mining activities through its subsidiaries and holds coal concessions across the regions of East Kalimantan and South Sumatra.	31 December 2017
PT Harum Energy Tbk ("**Harum Energy**")	Harum Energy engages in coal mining as well as operating coal mining supporting infrastructure. Through its subsidiaries, it manages a number of coal mining sites in Kalimantan.	31 December 2017
PT Mitrabara Adiperdana Tbk ("**Mitrabara Adiperdana**")	Mitrabara Adiperdana together with its subsidiaries primarily engages in coal mining business with concessions located in Kalimantan.	31 December 2017

PT Resource Alam Indonesia Tbk ("**Resource Alam Indonesia**")	Resource Alam Indonesia is engaged in coal mining and manufacturing high pressure laminates through its subsidiaries. The mining operation sites are mainly located in East Kalimantan.	31 December 2017
PT Toba Bara Sejahtra Tbk ("**Toba Bara Sejahtra**")	Toba Bara Sejahtra engages in coal mining and palm oil plantation in East Kalimantan with mining concessions as well as palm oil plantations in the region.	31 December 2017

In our evaluation, we have considered the following widely used valuation measures:

Valuation Measure	Description
P/S	P/S ratio or revenue multiple is a revenue-based valuation measure, and is the ratio of a company's market capitalisation divided by the historical or trailing 12-month revenue.
P/E	P/E ratio or earnings multiple is an earnings-based valuation measure, and is the ratio of a company's market capitalisation divided by the historical or trailing 12-month consolidated net profit attributable to shareholders after interest, taxation, depreciation and amortisation expenses. It is affected by the capital structure of a company, its tax position as well as its accounting policies relating to depreciation and intangible assets.
P/NTA	P/NTA ratio is an asset-based valuation measure, and is the ratio of a company's share price divided by NTA per share. The NTA refers to consolidated net tangible assets, which is the total assets of a company less intangible assets (such as goodwill, patents and trademarks) and total liabilities. It provides an estimate of the value a company assuming a hypothetical sale of all its tangible assets and repayment of its liabilities and obligations, with the balance being available for distribution to its shareholders. This approach is meaningful to the extent that it measures the value of each share that is attached to the net tangible assets of the company.
Enterprise value/Earnings before interests, taxes, depreciation and amortisation ("**EV/EBITDA**")	Enterprise value ("**EV**") refers to the sum of a company's market capitalisation, preferred equity, minority interests, short-term and long-term debts (inclusive of finance leases), less its cash and cash equivalents. The EV/EBITDA ratio is an earnings-based valuation measure which illustrates the ratio of the market value of an entity's business in relation to its historical or trailing 12-month pre-tax operating cashflow performance. The difference between EV/EBITDA ratio and P/E ratio (described above) is that it does not take into account the capital structure of a company as well as its interest, taxation, depreciation and amortisation charges.
Enterprise value/Reserves ("**EV/Reserves**")	EV/Reserves ratio illustrates the ratio of the market value of an entity's business in relation to the reserves (being proved and probable reserves) owned by the company in respect of its mining concessions. We wish to highlight that the estimated proved and probable reserves of the Comparable Companies may not reflect the entire potential reserves that could be explored and commercialised. Any comparison made in relation to EV/Reserves ratio is solely for illustration purposes only.
Enterprise value/Resources ("**EV/Resources**")	EV/Resources ratio illustrates the ratio of the market value of an entity's business in relation to the resources (being measured and indicated resources) owned by the company in respect of its mining concessions. We wish to highlight that the estimated resources of the Comparable Companies may not reflect the entire potential resources that could be explored and commercialised. Any comparison made in relation to EV/Resources ratio is solely for illustration purposes only.

The valuation ratios of the Comparable Companies based on their respective last traded share prices as at the Latest Practicable Date are set out as follows:

Singapore Comparable Companies	Grade ADB[1] (Kcal/kg)	Share Price[2][12] (US$)	Market Capitalisation (US$ million)	P/S[3] (times)	P/E[4] (times)	P/NTA[5] (times)	EV/EBITDA[6] (times)	EV/Reserves[7] (US$/tonne)	EV/Resources[8] (US$/tonne)
BlackGold	4,990	0.03	27.41	6.69	N.M.	2.52	N.M.	0.21	0.08
Geo Energy	4,124-7,438	0.16	215.25	0.68	5.87	1.40	3.20	3.00	2.37
High				6.69	5.87	2.52	3.20	3.00	2.37
Mean				3.69	5.87	1.96	3.20	1.61	1.23
Median				3.69	5.87	1.96	3.20	1.61	1.23
Low				0.68	5.87	1.40	3.20	0.21	0.08
Target Group	5,055-5,236[11]	N.A.	65.64[10]	N.M.	N.M.	N.M.	N.M.	0.71[7]	0.43[8]

Source: Bloomberg L.P., respective companies' annual reports, financial statements and IQPRs.

Indonesia Comparable Companies	Grade ADB[1] (Kcal/kg)	Share Price[2][12] (US$)	Market Capitalisation (US$ million)	P/S[3] (times)	P/E[4] (times)	P/NTA[5] (times)	EV/EBITDA[6] (times)	EV/Reserves[7] (US$/tonne)	EV/Resources[8] (US$/tonne)
Atlas Resources	5,300-7,300	0.09	260.59	8.17	18.76	N.M.	98.70[9]	1.35	0.65
Baramulti Suksessarana	5,100-5,300	0.19	484.61	1.22	5.67	3.26	3.61	4.09	N.A.
Golden Eagle Energy	N.A.	0.01	45.68	8.27	15.25	2.69	10.51	0.17	0.11
Harum Energy	5,800-6,400	0.21	578.38	1.73	12.70	2.04	4.69	6.17	0.88
Mitrabara Adiperdana	5,950-6,200	0.26	323.34	1.18	5.09	2.24	2.50	7.01	N.A.
Resource Alam Indonesia	4,890-6,500	0.03	154.34	2.16	15.30	1.90	8.78	2.15	N.A.
Toba Bara Sejahtra	5,447-5,695	0.16	322.17	0.90	10.96	2.11	3.69	5.70	2.63
High				8.27	18.76	3.26	10.51	7.01	2.63
Mean				3.38	11.96	2.37	5.63	3.81	1.07
Median				1.73	12.70	2.18	4.19	4.09	0.77
Low				0.90	5.09	1.90	2.50	0.17	0.11
Target Group	5,055-5,236[11]	N.A.	65.64[10]	N.M.	N.M.	N.M.	N.M.	0.71[7]	0.43[8]

Source: Bloomberg L.P., respective companies' websites, annual reports, financial statements and IQPRs.

Notes:

(1) ADB means air dried basis, being a basis for measuring the calorific value of coal.

(2) Share prices are the last traded share prices at the Latest Practicable Date. The Indonesia Stock Exchange was closed for trading from 11 June 2018 to 19 June 2018 due to public holiday in Indonesia. Accordingly, the share price for each of the Indonesia Comparable Companies is the last traded share price on 8 June 2018, being the last traded market day prior to the Latest Practicable Date.

(3) Historical P/S ratio of the Comparable Companies is calculated based on sales over a trailing 12-month period from 1 April 2017 to 31 March 2018. In respect of the Target Group, the Target Group did not generate any revenue for FY2018.

(4) Historical P/E ratio of the Comparable Companies is calculated based on earnings over a trailing 12-month period from 1 April 2017 to 31 March 2018. For FY2018, the Target Group is in a net loss position.

(5) The P/NTA ratio of the Comparable Companies is calculated based on their respective latest unaudited financial statements as announced on the respective stock exchanges as at the Latest Practicable Date. Based on the unaudited consolidated financial statements of the Target Group for FY2018, the Target Group is in a net tangible liability position.

(6) The EV/EBITDA ratio of the Comparable Companies is calculated based on (i) the sum of their respective market capitalisation as at the Latest Practicable Date, debt, minority interest and less cash based on their respective latest unaudited financial statements; and (ii) their respective EBITDA based on earnings before interest, taxes, depreciation and amortisation for a trailing 12-month period from 1 April 2017 to 31 March 2018. In respect of the Target Group, the EV/EBITDA ratio is based on (i) the Consideration, Total Debts, minority interest and less cash; and (ii) the EBITDA based on earnings before interest, taxes, depreciation and amortisation for FY2018.

(7) The EV/Reserves ratio of the Comparable Companies is calculated based on (i) the sum of their respective market capitalisation as at the Latest Practicable Date, debt, minority interest and less cash based on their respective latest unaudited financial statements; and (ii) reserves estimates of coal as reported in their respective latest annual reports, financial statements and publicly available announcements available as at the Latest Practicable Date. The EV/Reserves ratio of the Target Group is based on (i) the Consideration, Total Debts, and less cash based on its unaudited consolidated financial statements of the Target Group for FY2018; and (ii) proven and probable reserves estimates of coal of 194.6 million tonnes, as stated in the South Block IQPR.

(8) The EV/Resources ratio of the Comparable Companies is calculated based on (i) the sum of their respective market capitalisation as at the Latest Practicable Date, debt, minority interest and less cash based on their respective latest unaudited financial statements; and (ii) reserves estimates of coal as reported in their respective latest annual reports, financial statements and publicly available announcements available as at the Latest Practicable Date. The EV/Resources ratio of the Target Group is based on (i) the Consideration, Total Debts, and less cash based on the unaudited consolidated financial statements of the Target Group for FY2018; and (ii) measured and indicated resources estimates of coal of 319 million tonnes, as stated in the South Block IQPR.

(9) We have not included the EV/EBITDA ratio of Atlas Resources in the analysis as it is considered to be an outlier in view of its EV/EBITDA of 98.70 times.

(10) The market capitalisation of the Target Group is implied by the Consideration as the Target Group is a non-listed company.

(11) Refers to the Target Group's calorific value of the coal resources on an air dried basis. The reported calorific value of coal reserves in the South Block IQPR ranges from 3,977 to 4,596 kcal/kg on an as received basis.

(12) The foreign exchange rates used for the purpose of translating the share prices of the Comparable Companies into US$ are based on the closing rates as at the Latest Practicable Date.

Based on the above, we note the following:

(a) the P/S ratio of the Target Group as implied by the Consideration is not meaningful as the Target Group did not generate any revenue for FY2018;

(b) the P/E ratio of the Target Group as implied by the Consideration is negative and not meaningful as the Target Group recorded a loss after tax for FY2018;

(c) the P/NTA ratio of the Target Group as implied by the Consideration is negative and not meaningful as the Target Group was in a net tangible liability position as at 31 March 2018;

(d) the EV/EBITDA ratio of the Target Group as implied by the Consideration is negative and not meaningful as the Target Group had reported a loss before interest, taxes, depreciation and amortisation for FY2018;

(e) the EV/Reserves ratio of the Target Group as implied by the Consideration is lower than the mean and median but within the range of EV/Reserves ratio of the Singapore Comparable Companies and the Indonesia Comparable Companies; and

(f) the EV/Resources ratio of the Target Group as implied by the Consideration is lower than the mean and median but within the range of EV/Resources ratio of the Singapore Comparable Companies and the Indonesia Comparable Companies.

6. FINANCIAL EFFECTS OF THE PROPOSED ACQUISITION

Details on the financial effects of the Proposed Acquisition (based on the Group's audited consolidated financial statements for the financial year ended 31 December 2017 and the Target Group's unaudited consolidated financial statements for the period from 1 January 2017 to 31 December 2017) are set out in Section 7 of the Circular. The financial effects are for illustrative purposes only and do not purport to reflect the actual financial effects or the future financial performance or financial position of the Company and the Group after the completion of the Proposed Acquisition.

In summary, we note the following:

(a) Share Capital

The Proposed Acquisition will not have any impact on the issued share capital and shareholding structure of the Company as the Consideration is to be fully satisfied by cash, and does not involve the allotment and issuance of any new shares in the Company.

(b) NTA per Share

The Proposed Acquisition will result in a material decrease in the NTA per Share of the Group. The material decrease was due to the deduction of (i) goodwill of US$64,165,000 arising from consolidation upon completion of the Proposed Acquisition; and (ii) intangible assets of US$76,571,000 which relates to the mining properties of the Target Group.

	As at 31 December 2017	Immediately following completion of the Proposed Acquisition
NTA of the Group (US$'000)	284,887	144,151
Number of Shares excluding Treasury Shares	2,353,100,380	2,353,100,380
NTA Per Share (US cents)	12.11	6.13

(c) EPS

The EPS following the completion of the Proposed Acquisition will not materially change as losses from the Target Group are insignificant.

	For the financial year ended 31 December 2017	Immediately following completion of the Proposed Acquisition
Net profit of the Group for the financial year ended 31 December 2017 (US$)	62,950,000	62,760,000
Weighted average number of Shares in issue	2,353,100,380	2,353,100,380
Net profit per Share (US cents) - Basic and diluted	2.68	2.67

For the avoidance of doubt, for the purpose of computing the financial effects of the Proposed Acquisition, the combined proforma financial effects of the Proposed Acquisition on the Group is based on the unaudited consolidated financial statements of the Target Group for the period from 1 January 2017 to 31 December 2017 as the Group's financial year-end is 31 December and the Target Group's financial year-end is 31 March.

7. OTHER RELEVANT CONSIDERATIONS

7.1 Fairness opinion by KJPP Jennywati, Kusnanto & Rekan

We understand from the Management that GEMS, being listed on the IDX, is required to obtain a fairness opinion on the Proposed Acquisition which is categorized as an affiliated transaction as well as a material transaction, in compliance with Rules IX.E.1 and IX.E.2 of the Indonesian Capital Market and Financial Institutions Supervisory Agency ("**Bapepam-LK**"). In this regard, GEMS commissioned KJPP Jennywati, Kusnanto & Rekan ("**Independent Appraiser**"), an independent business appraiser, to provide the said fairness opinion.

The report by the Independent Appraiser ("**Fairness Opinion Report**") was dated 12 May 2017, and stated that the fairness opinion set out therein was estimated as of 31 December 2016. Based on the Fairness Opinion Report, the valuation methods used in valuing the Sales Shares were (i) the assets accumulation method; (ii) the guideline publicly traded company method; and (iii) the discounted future economic income method. The assets accumulation method was applied through the revaluation of all the components of assets and liabilities to their market values or fair market values. The guideline publicly traded company method was applied through assessment of available data of public companies with similar business, scale and assets. The discounted future economic income method was applied by the determination of the present value of projected net cash flow, as provided by the management of the relevant entities. The values obtained from each method were then reconciled by weighting.

The Independent Appraiser has ascribed a value of US$66.62 million to the Sale Shares and the Mandatory Convertible Bonds, and opined that the Proposed Acquisition is fair. We note that the Consideration of US$65.64 million is at a slight discount of approximately 1.5% to the fair value ascribed by the Independent Appraiser. We note that the Fairness Opinion Report mentioned that the difference between the Consideration and the fair value of the Sale Shares and the Mandatory Convertible Bonds did not exceed 7.5%, and that the Proposed Acquisition was thus in compliance with Bapepam-LK Rule VIII.C.3.

For further information on the valuation done by the Independent Appraiser, please refer to the Fairness Opinion Report as announced by GEMS on the Indonesia Stock Exchange on 16 May 2017 and announced by the Company on SGXNET on 22 June 2018.

7.2 Commencement of commercial mining operations

Based on information provided by the Management, mining activities of the Belani block (within the South Block) have commenced but have not reached commercial production, while the Batukucing and Muara Lakitan blocks (both within the South Block) are ready to be mined. Trial coal production from the Belani block commenced in September 2017, whereas production from the Batukucing and Muara Lakitan blocks is expected to commence from 2019 onwards, subject to market conditions and approvals from the relevant authorities. The Belani block is expected to commence commercial production in the second half of 2018, after the logistics and evacuation infrastructure facilities from pit to port are operational. Based on the South Block IQPR, total capital cost to be incurred for the South Block over the life of mine is estimated to be approximately US$29.05 million ("**Capital Expenditure**"), and this comprises mainly land compensation, mine infrastructure, and upgrading of road and port facilities. GEMS intends to finance the Capital Expenditure with GEMS' internal resources and debt financing. There is no assurance that the actual capital cost to be incurred will not deviate from the estimated capital cost stated in the South Block IQPR and any

such deviation may have an adverse impact on the prescribed value of the BSL Coal Concession by Salva Mining. Please refer to Appendices 1, 4A and 4B to the Circular for further information on the BSL Coal Concession Area, including *inter alia*, the capital requirements, the break-even stripping ratio, the average unit operating cost, and the various permits and approvals required for the mining activities.

To the best knowledge of the GMR Vendor's Directors' knowledge and belief, (a) all material regulatory approvals to commence production from the Belani Block have been obtained, and (b) all material licenses, permits and approvals with regard to further mining activities in the BSL Coal Concession Area have been obtained.

8. OUR OPINION

In arriving at our opinion, we have considered the views and representations made by the Directors and the Management of the Company, and reviewed and deliberated on the factors which we consider to be relevant and to have a significant bearing on our assessment as to whether the financial terms of the Proposed Acquisition as an Interested Person Transaction are normal commercial terms and are not prejudicial to the interests of the Company and its Minority Shareholders. These factors include the following:

(a) the rationale for the Proposed Acquisition;

(b) the financial performance and position of the Target Group. We note in particular that the financial position of the Target Group had not taken into consideration any commercial value of the BSL Coal Concession Area, in respect of the coal reserves and resources;

(c) the enterprise value of the Target Group of US$138.11 million as implied by the Consideration, represents approximately 51.48% of the preferred value of the BSL Coal Concession Area as ascribed by Salva Mining in the IQPRs;

(d) the EV/Reserves ratio of the Target Group as implied by the Consideration is lower than the mean and median but within the range of EV/Reserves ratio of the Singapore Comparable Companies and the Indonesia Comparable Companies;

(e) the EV/Resources ratio of the Target Group as implied by the Consideration is lower than the mean and median but within the range of EV/Resources ratio of the Singapore Comparable Companies and the Indonesia Comparable Companies;

(f) the financial effects of the Proposed Acquisition as outlined in Section 7 of the Circular and Section 6 of this IFA Letter;

(g) the Independent Appraiser, KJPP Jennywati, Kusnanto and Rekan, has opined that the Proposed Acquisition is fair and the Consideration is at a slight discount to the fair value as ascribed by the Independent Appraiser; and

(h) other relevant consideration as set out in Section 7.2 of this IFA Letter.

We have carefully considered as many factors as we deem essential and balance them before reaching our opinion. Accordingly, it is important that our IFA Letter, in particular, all the considerations and information which we have taken into account, be read in its entirety.

Having considered carefully the information available to us as at the Latest Practicable Date, and based on our analyses, we are of the opinion that the Proposed Acquisition as an Interested Person Transaction is on normal commercial terms and is not prejudicial to the interests of the Company and its Minority Shareholders.

Further, we wish to highlight that the Proposed Acquisition does not, in and by itself, guarantee that the Group would be profitable in the future. Whether the Group will be profitable in future depends on a combination of factors, including but not limited to, coal prices, land acquisition, government permits and approvals, economic, political, and technology factors which is beyond the scope of this IFA Letter.

In arriving at our opinion, we wish to emphasize that the Directors have not provided us with any profit projections of the Target Group and we have, *inter alia*, relied on the IQPRs, relevant statements contained in the Circular, confirmation, advice and representation by the Directors, and the Company's announcement in relation to the Proposed Acquisition. In addition, Independent Directors should note that we have arrived at our recommendation based on information made available to us prior to and including the Latest Practicable Date. We assume no responsibility to update, review or reaffirm our opinion in light of any subsequent development after the Latest Practicable Date, unless otherwise stated.

We would like to highlight that we do not express any opinion on the commercial merits of the Proposed Acquisition which remains the sole responsibility of the Directors. It is also not within our terms of reference to provide an opinion on the relative merits of the Proposed Acquisition vis-à-vis any alternative transactions previously considered by the Company or transactions that the Company may consider in the future.

We have prepared this IFA Letter pursuant to Rule 921(4)(a) of the Listing Manual as well as for the use by the Independent Directors in connection with their consideration of the Proposed Acquisition as an Interested Person Transaction, but any recommendations made by the Independent Directors in respect of the Proposed Acquisition shall remain their sole responsibility. Whilst a copy of this IFA Letter may be reproduced in the Circular, neither the Company, the Directors nor any other persons may reproduce, disseminate or quote this IFA Letter (or any part thereof) for any purposes (other than for the consideration of the Proposed Acquisition) at any time and in any manner without the prior written consent of ZICO Capital.

This opinion is governed by, and construed in accordance with, the laws of Singapore, and is strictly limited to the matters stated herein and does not apply by implication to any other matter.

Yours faithfully
For and on behalf of
ZICO Capital Pte. Ltd.

Alex Tan
Chief Executive Officer

Karen Soh
Managing Director

SALVA
Mining Consultants

Golden Energy and Resources Ltd.

PT Bara Sentosa Lestari Project ("BSL")

Independent Qualified Person's Report - South Block
Part 1 – Coal Resource & Reserve

14 February 2018

Golden Energy and Resources Ltd.

PT Bara Sentosa Lestari Project ("BSL")

Independent Qualified Person's Report - South Block

Part 1 – Coal Resource & Reserve

Salva Mining Pty Ltd
300 Adelaide Street, Brisbane, QLD 4000, Australia
Email: inf@salvamining.com.au
Website: www.salvamining.com.au
Phone: +61 (0) 407 771 528

Effective Date: 31 December 2017

14 February 2018

Independent Qualified Person:

Manish Garg
BEng (Hons), Master of Applied Finance
MAusIMM
Director, Salva Mining Pty Ltd

Subject Specialists:

Mr. Sonik Suri
Principal Consultant – Geology
Salva Mining- Brisbane Office

Dr. Ross Halatchev
Principal Consultant – Mining
Salva Mining - Brisbane Office

SALVA
Mining Consultants

Table of contents

Executive Summary **10**

1 Introduction **14**

1.1 Scope 14

1.2 Data sources 14

1.3 Limitations 14

1.4 Disclaimer and warranty 15

2 Independent Qualified Person's Statement **17**

2.1 Statement of Independence 17

3 Project Description **18**

3.1 Property Description and Access 18

4 Geology **21**

4.1 Regional Geology 21

4.2 Local Geology - Muara Lakitan (ML Block) 22

4.3 Local Geology – Belani (BL) Sub-block 25

4.4 Local Geology – Batukucing (BK) Sub Block 28

5 Geological Database and Modelling **30**

5.1 Muara Lakitan (ML) 30

5.1.1 Geological Data 30

5.1.2 Survey 31

5.1.3 Coal Density 31

5.1.4 Data Validation 31

5.1.5 Coal Quality 31

5.2 Belani (BL) 34

5.2.1 Geological Data 34

5.2.2 Survey 35

5.2.3 Coal Density 35

5.2.4 Data Validation 36

5.2.5 Coal Quality 36

5.3 Batukucing Block (BK) 38

5.3.1 Geological Data 38

5.3.2 Survey 39
5.3.3 Coal Density 39
5.3.4 Data Validation 39
5.3.5 Coal Quality 40
6 Resource Model Construction 42
6.1 Muara Lakitan (ML) Block 42
6.1.1 Structural model 42
6.1.2 Coal Seams 43
6.1.3 Coal Quality Model 44
6.2 Belani (BL) Block 45
6.2.1 Structural model 45
6.2.2 Coal seams 46
6.2.3 Coal Quality Model 47
6.3 Batukucing (BK) Block 48
6.3.1 Structural Model 48
6.3.2 Coal Seams 49
6.3.3 Coal Quality Model 50
7 Coal Resources 52
7.1 Geological Confidence and Resource Classification 52
7.2 Coal Resource Statement 53
7.3 Comparison with Previous Estimates 55
8 Reserve Estimate 56
8.1 Estimation Methodology 56
8.2 Modifying Factors 56
8.3 Notes on Modifying Factors 57
8.3.1 Mining Factors 57
8.3.2 Geo-technical Factors 58
8.3.3 Hydrogeological Factors 58
8.3.4 Processing Factors 58
8.3.5 Mine Logistics Factors 59
8.3.6 Permits and Approvals 66
8.3.7 Cost and Revenue Factors 66

8.3.8 Marketing and Product Specifications 67
8.3.9 Other Relevant Factors 67
8.4 Optimised Pit Shell 68
8.4.1 Optimised Pit Shell 68
8.5 Audits and Reviews 77
8.6 Discussion of Relative Accuracy and Confidence 77
8.7 Reserves Classification 77
8.8 Coal Reserve Statement 78
8.9 Seam by Seam Coal Reserve 79
8.10 Comparison with Previous Estimates 80
9 JORC Table 1 81
10 References 82
Appendix A: CVs 83
Appendix B: JORC Table 1 84
Appendix C: Collars 97
Appendix D: QA/AC Review - Coal Quality 110
Appendix E: Plans, Sections and Resource Polygons 128

List of Figures

Figure 3:1 General Location Plan 18
Figure 3:2 Project Location 19
Figure 4:1 Regional Geology - South Sumatra Basin 21
Figure 4:2 ML Block - Typical E-W Cross Section 23
Figure 4:3 ML Block - Generalised Stratigraphic Column 24
Figure 4:4 BL Block - Typical Cross Section 26
Figure 4:5 BL Block - Generalised Stratigraphic Column 27
Figure 4:6 BK Block - Typical NE-SW Cross Section 28
Figure 4:7 BK Block - Generalised Stratigraphic Column 29
Figure 8:1 Overview - Coal Transport by River 59
Figure 8:2 Coal Transport by River 60

Figure 8:3 Location of Ports and Bridges on Musi River 61
Figure 8:4 Coal Transport by Road from Belani Pit to Gorby Port 64
Figure 8:5 Coal Transport by Road from Muara Lakitan to Gorby Port 65
Figure 8:6 Final Pit Design, Muara Lakitan 69
Figure 8:7 Cross Section 'E-E', Muara Lakitan 70
Figure 8:8 Cross Section 'F-F', Muara Lakitan 71
Figure 8:9 Final Pit Design, Batukucing 72
Figure 8:10 Cross Section 'A-A', Batukucing 73
Figure 8:11 Cross Section 'B-B', Batukucing 74
Figure 8:12 Final Pit Design, Belani 75
Figure 8:13 Cross Section A-A'', Belani 76
Figure 8:14 General relationships between Mineral Resources & Ore Reserves . 78

List of Tables

Table 4:1 ML Block - Coal Seam Statistics 22
Table 4:2 BL Block - Coal Seam Statistics 25
Table 4:3 BK Block - Coal Seam Statistics 28
Table 5:1 ML Block – Summary of Drilling Data 30
Table 5:2 ML Block - Summary of Coal Quality by Seam 32
Table 5:3 ML Block - Coal Sampling Summary 34
Table 5:4 BL Block – Summary of Drilling Data 36
Table 5:5 BL Block – Summary of Coal Quality by Seam 36
Table 5:6 BL Block - Coal Sampling Summary 38
Table 5:7 Batukucing Block - Summary of Drilling Data 40
Table 5:8 Batukucing Block - Summary of Coal Quality by Seam 40
Table 6:1 ML Block - Model Parameters 42
Table 6:2 ML Block - Schema Elements 43
Table 6:3 BL Block - Model Parameters 45
Table 6:4 BL Block - Schema Elements 46
Table 6:5 BK Block – Model Parameters 48

Table 6:6 BK Block – Schema Elements 49
Table 7:1 BSL South Block Project - Coal Resources as at 31 December 2017 .. 53
Table 7:2 Muara Lakitan Coal Resources as at 31 December 2017 53
Table 7:3 Belani Coal Resources as at 31 December 2017 53
Table 7:4 Batukucing Coal Resources as at 31 December 2017 53
Table 7:5 ML Coal Resources (Seam by Seam) as at 31 December 2017 54
Table 7:6 Belani Coal Resources (Seam by Seam) as at 31 December 2017 54
Table 7:7 Batukucing Coal Resources (Seam by Seam) as at 31 December 201755
Table 7:8 Coal Resource - Comparison with Previous Estimate 55
Table 8:1 Modifying & Mine Optimisation Factors 56
Table 8:2 Road Logistics 62
Table 8:3 Logistics – Tonnage (Mt) over Life of Mine 63
Table 8:4 Estimation of Capital Cost 66
Table 8:5 Estimation of Break-even Stripping Ratio 67
Table 8:6 Long Term Price Estimate 67
Table 8:7 In-situ & ROM Scheduled Quantities & Reserves, BSL Concession 68
Table 8:8 Coal Reserves for BSL Coal Concession as at 31 December 2017 78
Table 8:9 Seam by Seam Coal Reserves for Muara Lakitan at 31 December 201779
Table 8:10 Seam by Seam Coal Reserves for Batukucing at 31 December 201779
Table 8:11 Seam by Seam Coal Reserves for Belani as at 31 December 2017.. 80
Table 8:12 Coal Reserve - Comparison with Previous Estimates, ML block 80

SALVA Mining Consultants

Key abbreviations

0	degrees
adb	Air dried basis
AMSL	above mean sea level
ar	As received basis
ASR	Average stripping ratio
AusIMM	Australasian Institute of Mining and Metallurgy
Batter	Slope of Advancing Mine Strip
bcm	bank cubic metre
BD	bulk density
°C	degrees Celsius
CAPEX	capital expenditure
Coal Resource	A 'Coal Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Coal Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Coal Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
Coal Reserve	A 'Coal Reserve' is the economically mineable part of a Measured and/or Indicated Coal Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined, usually the point where the Coal is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.
GEAR	Golden Energy and Resources Ltd.
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code' or 'the Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves.
JORC Committee	Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
k	thousand
kg	kilogram
kt	thousand tonne
km	Kilometre(s)
km2	Square kilometre
m	metre
M	million

m RL	metres reduced level
m^3	cubic metre
mm	millimetre(s)
Mt	million tonnes
Mtpa	million tonnes per annum
NPV	net present value
OPEX	operating expenditure
OS	oversize
RD	Relative Density
ROM	run of mine
Salva Mining	Salva Mining Pty Ltd
Stripping Ratio SR	Cubic Meters of waste/tonne of coal
t	tonne
tpa	tonnes per annum

SALVA
Mining Consultants

Executive Summary

Golden Energy and Resources Ltd. ("GEAR" or "Client") has engaged Salva Mining Pty Ltd ("Salva Mining") to prepare an Independent Qualified Person's Report ("Report") which includes Open Cut Coal Resources and Reserves along with mineral asset valuation for the South Block of Bara Sentosa Lestari Project ("BSL Mine" or "BSL Project") located in South Sumatra, Indonesia.

The Qualified Person's Report is part of the work completed by GEAR relating to the potential acquisition of these assets and is planned to be presented to the company's shareholders as part of continuous disclosure requirements of the company. The Resource and Reserve contained within this Report has been undertaken in compliance with the requirements of the reporting guidelines of the 2012 Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("The JORC Code").

The effective date of this Report is 31 December 2017, the date on which the Resource and Reserves were estimated.

BSL Project in Indonesia

The Bara Sentosa Lestari Project – South Block ("BSL Project") is located in the Musi Rawas Utara and Musi Rawas Regencies, South Sumatra, Indonesia. The project area is approximately equidistant (200-250 km by road) from the major cities of Palembang and Bengkulu.

The BSL coal deposit is held through Generation II Coal Contract of Work. Salva Mining understands that Company has received all exploitation and operations permits from the government and the project is currently in the commissioning stage.

The BSL concession consists of two sub-blocks, namely North and South Blocks, covering a total area of 23,300Ha. North Block hasn't been drilled extensive as such no Resource or Reserve was delineated at the North Block.

4 key prospective areas were identified in the South Block. These sub-blocks are:

- Muara Lakitan coal deposit ("ML" or "Muara Lakitan");
- Belani ("BL"),
- Batukucing ("BK") and
- Ampalau coal deposits.

There is no resource drilling and resource estimate for the Ampalau coal deposit. This report covers the Coal Resource and Reserves estimates for the ML, BL and BK sub-blocks in BSL South Block only.

Geology

The late Miocene to Pliocene Muara Enim Formation ("Muara Enim Fm") is the main coal bearing formation present in the South Sumatra basin. The thickness of this formation, in the area around Muara Enim and Lahat, is around 500-700m.The thickness of individual coal seams varies with the thickness of the formation, typically varying between 10 m to 30 m in thickness, with shallow marine clays at the base, and shoreline and delta plain facies (sand, clay, coal) at the top. The coal present in most of the basin is of low rank.

The coal seams within the ML deposit occur in Lower Muara Enim Formation of Miocene age. The deposit has multiple coal seams with up to ten seams identified (Seams 200 to 1050 in descending stratigraphic order) with multiple sub-seams and seam splits. The main seams are 800 and 900 with an average thickness of 6 m and 9 m respectively.

The Belani deposit has multiple coal seams with eleven different coal seams and their sub seams identified. These seams have a combined strike length of over 4km. The main seams out of the total package have been named as E420, E410, E720, E710, E820, E810, E920 and E910 (in descending stratigraphic order). Out of these coal seams, the two thickest seams, Seam 420 and Seam 910, have an average thickness of 5.28m and 12.05m respectively.

The Batukucing coal deposit is believed to be of Miocene age. A total of 10 seams have been identified with a number of plies (seam splits) identified. 9 of these plies have been identified as viable, within the Batukucing tenement, occurring over a strike length of over 4km.These coal plies have been named: E420, E410, E500, E600, E700, E820, E810, E920 and E910 (in descending stratigraphic order). Out of these, B600, B700, B810, and B910 average 2.7m, 2.4m, 2.7m, and 3.6m in thickness respectively, whilst other target seams typically range from 1.0m to 2.5m.

Resource

Salva Mining have estimated total Coal Resources of 393 million tonnes (Mt) on an in-situ air dried moisture basis, to a maximum depth of 150 metres. The total tonnes are comprised of 175 Mt of Measured, 144 Mt of Indicated and 74 Mt of Inferred Resources.

BSL Coal Resources as at 31 December 2017

Resource Classification	Mass (Mt)	TM (adb) (%)	IM (adb) (%)	Ash (adb) (%)	Volatile Matter (adb) %	Total Sulphur (adb) %	GCV (adb) kcal/kg	Relative Density (adb)
Measured	175	35.3	19.8	5	38.7	0.3	5,055	1.37
Indicated	144	33.3	18.8	4.9	38.9	0.3	5,236	1.37
Inferred	74	34.9	18.1	6.8	38.5	0.4	5,112	1.40
Total	393	34.5	19.1	5.3	38.7	0.3	5,132	1.38

(*Note: individual totals may differ due to rounding*)

Mining Modification factors – Resource to Reserve

Coal Reserves were estimated by applying modifying factors including mining parameters and exclusion criteria to the Coal Resources. The mining factors (such as recovery and dilution) were defined based on the proposed open cut mining method and the coal seam characteristics. The exclusion criteria included the lease boundary and a minimum working section thickness. Minex "Optimiser" software was used to generate a series of incremental pit shells which reflect different economic scenarios and changes in the breakeven strip ratio.

An economic model was prepared for the mining operation to determine the project breakeven or incremental strip ping ratio. The pit optimisation results were examined and pit shells selected where the incremental stripping ratios were equal to break even strip ratio determined at a point where the costs for mining and handling the coal equalled the revenue generated by the coal.

SALVA
Mining Consultants

Proposed Mining Method

The proposed mining method can be described as "multi seam, moderate dip, open cut coal mining using truck and shovel equipment in a haul back operation".

Muara Lakitan deposit

The coal seam distribution within the Muara Lakitan deposit resulted in the Optimiser identifying two main pits where the main bottom seam is 970. Seams 800 group and 900 groups are well developed in both the northern and southern pits. The pits were subject to adjustments to form a practical pit design, which lead to the exclusion of the minor narrow pit shells and the resultant formation of two separate pit shells (Mineable Pit Shells), which formed the basis of the subsequent reserves estimate.

The coal quantities within the Mineable Pit Shells through the application of mining factors converted to a total of 158.9 Mt of ROM coal.

Batukucing deposit

The coal seam distribution within the Batukucing deposit resulted in the Optimiser identifying the main pit where the main basal seam is B910 well developed in the pit. The pit was subjected to adjustments to form a practical pit design, which led to the exclusion of the minor narrow pit shells and the resultant formation of the main pit shell, (Mineable Pit Shell), which formed the basis of the subsequent reserves estimate.

The coal quantities within the Mineable Pit Shell through the application of mining factors converted to a total of 18.9 Mt of ROM coal.

Belani deposit

The coal seam distribution within the Belani deposit resulted in the Optimiser identifying the main pit where the main basal seam is E910 well developed in the pit. The pit was subjected to adjustments to form a practical pit design, which led to the exclusion of the minor narrow pit shells and the resultant formation of the main pit shell, (Mineable Pit Shell), which formed the basis of the subsequent reserves estimate.

The coal quantities within the Mineable Pit Shell through the application of mining factors converted to a total of 53.8 Mt of ROM coal.

Coal Reserves

The Measured and Indicated confidence limits were overlaid on these pit shells and Inferred tonnes were excluded from the estimate. The Coal Reserves were then categorised into Proved and Probable based on the Coal Resource confidence and the level of detail in the mine planning. Based on this approach, a total of 194.6 Mt of Open Cut Coal Reserves were estimated at BSL coal deposit by Salva Mining of which 130.3 Mt of Coal Reserves are considered to be of Proved category and balance 64.4 Mt of Coal Reserves to be of Probable category.

The Statement of Estimated Coal Reserves for BSL Project in Proved and Probable category is shown in the table below:

SALVA
Mining Consultants

BSL Project Coal Reserves as at 31 December 2017

Concession	Coal Reserve (Mt)			RD, adb t/m3	TM, arb %	IM adb %	Ash, adb %	CV, arb Kcal/kg	TS, adb %
	Proved	Probable	Total						
Muara Lakitan	109.8	31.3	141.1	1.38	36.8	20.9	5.0	3,977	0.30
Batukucing	1.7	11.5	13.1	1.42	33.6	9.9	5.4	4,369	0.45
Belani	18.8	21.6	40.4	1.33	28.2	19.5	4.8	4,596	0.29
Total	**130.3**	**64.4**	**194.6**	**1.37**	**34.8**	**19.9**	**5.0**	**4,132**	**0.31**

Coal Resources are reported inclusive of Coal Reserves. The coal will be sold as a run of mine (ROM) product; hence Marketable Reserves will equal Coal Reserves. The average predicted product coal quality based on the total Coal Reserves is Total Moisture TM (ar) 34.8%, Ash (adb) 5.0%, CV (gar), 4,132 Kcal/Kg and sulphur content 0.31%.

This report may only be presented in its entirety. Parties wishing to publish or edit selected parts of the text, or use the Statement for public reporting, must obtain prior written approval from Salva Mining and the signatories of this report.

SALVA
Mining Consultants

1 Introduction

Golden Energy and Resources Ltd. ("GEAR" or "Client") has engaged Salva Mining Pty Ltd ("Salva Mining") to prepare an Independent Qualified Person's Report ("Report") which includes Open Cut Coal Resources and Reserves along with mineral asset valuation for the Bara Sentosa Lestari Concession – South Block Project ("BSL Mine" or "BSL Project") located in South Sumatra, Indonesia.

The Qualified Person's Report is part of the work completed by GEAR relating to the potential acquisition of these assets and is planned to be presented to the company's shareholders as part of continuous disclosure requirements of the company. The Resource and Reserve contained within this Report has been undertaken in compliance with the requirements of the reporting guidelines of the 2012 Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("The JORC Code").

The effective date of this Report is 31 December 2017, the date on which the Resource and Reserves were estimated.

1.1 Scope

Golden Energy and Resources Ltd. has requested that Salva Mining prepare an Independent Qualified Person's Report ("Report") for the Bara Sentosa Lestari – South Block Project ("BSL Mine" or "BSL Project") located in the Musi Rawas Utara and Musi Rawas Regencies in South Sumatra Province, Indonesia.

Part 1 of this report covers the mineral asset valuation the BSL coal concession only and not for the entire company which holds the assets. Part 2 of the report covers the coal resource and reserves for the BSL South Block coal concession.

1.2 Data sources

This Report is based on the information provided by Golden Energy and Resources Ltd., the technical reports of previous consultants and vendors, GMR Resources Ltd ("GMR"), as well as other published and unpublished data relevant to the project area.

Salva Mining has carried out its own independent assessment of the quality of the geological and mining data. Salva Mining relied on an Independent legal firm, Makes & Partners Law Firm ("MPL"), a legal specialist that has carried out independent enquiry regarding the status of agreements, royalties or concession standing pertaining to the assets.

In developing our assumptions for this Statement, Salva Mining has relied upon information provided by the company and information available in the public domain. Key sources are outlined in this Report and all data included in the preparation of this Report has been detailed in the references section of this report. Salva Mining has accepted all information supplied to it in good faith.

1.3 Limitations

After due enquiry in accordance with the scope of work and subject to the limitations of the Report hereunder, Salva Mining confirms that:

- The input, handling, computation and output of the geological data and Coal Resource and Reserve information has been conducted in a professional and accurate manner, to the high standards commonly expected within the mining professions.
- The interpretation, estimation and reporting of the Coal Reserve Statement has been conducted in a professional and competent manner, to the high standards commonly expected within the Geosciences and mining professions, and in accordance with the principles and definitions of the JORC Code (2012).
- In conducting this assessment, Salva Mining has addressed and assessed all activities and technical matters that might reasonably be considered relevant and material to such an assessment conducted to internationally accepted standards. Based on observations and a review of available documentation, Salva Mining has, after reasonable enquiry, been satisfied that there are no other relevant material issues outstanding.
- The conclusions presented in this report are professional opinions based solely upon Salva Mining's interpretations of the documentation received and other available information, as referenced in this Report. These conclusions are intended exclusively for the purposes stated herein.
- For these reasons, prospective investors must make their own assumptions and their own assessments of the subject matter of this Report.

Opinions presented in this report apply to the conditions and features as noted in the documentation, and those reasonably foreseeable. These opinions cannot necessarily apply to conditions and features that may arise after the date of this report, about which Salva Mining have had no prior knowledge nor had the opportunity to evaluate.

1.4 Disclaimer and warranty

This Report was commissioned by Golden Energy and Resources Ltd. on a fee-for-service basis according to Salva Mining's schedule of rates. Salva Mining's fee is not contingent on the outcome of its valuation or the success or failure for the transaction for which the report was prepared. None of Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates have (or had) a pecuniary or beneficial interest in/or association with any of the Golden Energy and Resources Ltd, or their directors, substantial shareholders, subsidiaries, associated companies, advisors and their associates prior to or during the preparation of this report.

Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates are independent of Golden Energy and Resources Ltd., its directors, substantial shareholders, advisers and their associates.

A draft version of this report was provided to the directors of Golden Energy and Resources Ltd. for comment in respect of omissions and factual accuracy. As recommended in Section 39 of the VALMIN Code, Golden Energy and Resources Ltd has provided Salva Mining with an indemnity under which Salva Mining is to be compensated for any liability and/or any additional work or expenditure, which:

- Results from Salva Mining's reliance on information provided by Golden Energy and Resources Ltd and/or their Independent consultants that is materially inaccurate or incomplete, or
- Relates to any consequential extension of workload through queries, questions or public hearings arising from this report.

This report may contain or refer to forward-looking information based on current expectations, including, but not limited to timing of mineral Resource estimates, future exploration or project development programs and the impact of these events on the Golden Energy and Resources Ltd.

Forward-looking information is subject to significant risks and uncertainties, as actual results may differ materially from forecasted results. Forward-looking information is provided as of the date hereof and Salva Mining assumes no responsibility to update or revise them to reflect new events or circumstances.

The conclusions expressed in this report are as on the 31 December 2017, the date on which the Resource and Reserves were estimated. The estimates are only appropriate for this date and may change in time in response to variations in economic, market, legal or political factors, in addition to ongoing exploration results. All monetary values outlined in this report are expressed in US dollars ($) unless otherwise stated. Salva Mining services exclude any commentary on the fairness or reasonableness of any consideration in relation to these assets.

2 Independent Qualified Person's Statement

This Resource and Reserve report has been written following the guidelines contained within the 2015 Edition of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Experts Reports ("the VALMIN Code") and the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("the JORC Code"). It has been prepared under the supervision of Mr. Manish Garg (Director – Consulting / Partner, Salva Mining) who takes overall responsibility for the report and is an Independent Expert as defined by the VALMIN Code.

Sections of the report which pertain to Coal Resources have been prepared by Mr. Sonik Suri (Principal Consultant, Geology) who is a subject specialist and a Competent Person as defined by the JORC Code. Sections of the report which pertain to Coal Reserves have been prepared by Dr. Ross Halatchev (Principal Consultant, Mining) who is a subject specialist and a Competent Person as defined by the JORC Code.

This report was prepared on behalf of Salva Mining by the signatory to this report, assisted by the subject specialists' competent persons whose qualifications and experience are set out in Appendix A of this report.

Mr. Manish Garg
Director
Salva Mining Pty Ltd

2.1 Statement of Independence

This Report was commissioned by Golden Energy and Resources Ltd. on a fee-for-service basis according to Salva Mining's schedule of rates which varies from USD 100/hr to USD 300/hr depending on the Consultant's skills and experience. Salva Mining's fee is not contingent on the outcome of its valuation or the success or failure for the transaction for which the report was prepared. The above-mentioned person(s) have no interest whatsoever in the mining assets reviewed and will gain no reward for the provision of this techno-commercial assessment.

Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates are independent of Golden Energy and Resources Ltd., its directors, substantial shareholders, advisers and their associates.

None of Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates have (or had) a pecuniary or beneficial interest in/or association with any of the Golden Energy and Resources Ltd., or their directors, substantial shareholders, subsidiaries, associated companies, advisors and their associates prior to or during the preparation of this report.

SALVA
Mining Consultants

3 Project Description

3.1 Property Description and Access

The Bara Sentosa Lestari Coal Concession ("BSL Project") is located in the Musi Rawas Utara and Musi Rawas Regencies, South Sumatra, Indonesia (Figure 3:1). The BSL Project area is located almost equidistant (200 - 250 km by road) from the major cities of Sumatra Island, namely Palembang and Bengkulu.

Figure 3:1 General Location Plan

The BSL coal deposit is a part of the coal deposits held through Generation II Coal Contract of Work (PKP2P: 015/PK/PTBA-BL/1994) and is currently in the advanced development stage. These coal deposits were previously held by PT. Duta Sarana Internusa and PT Banpu Public Company Limited.

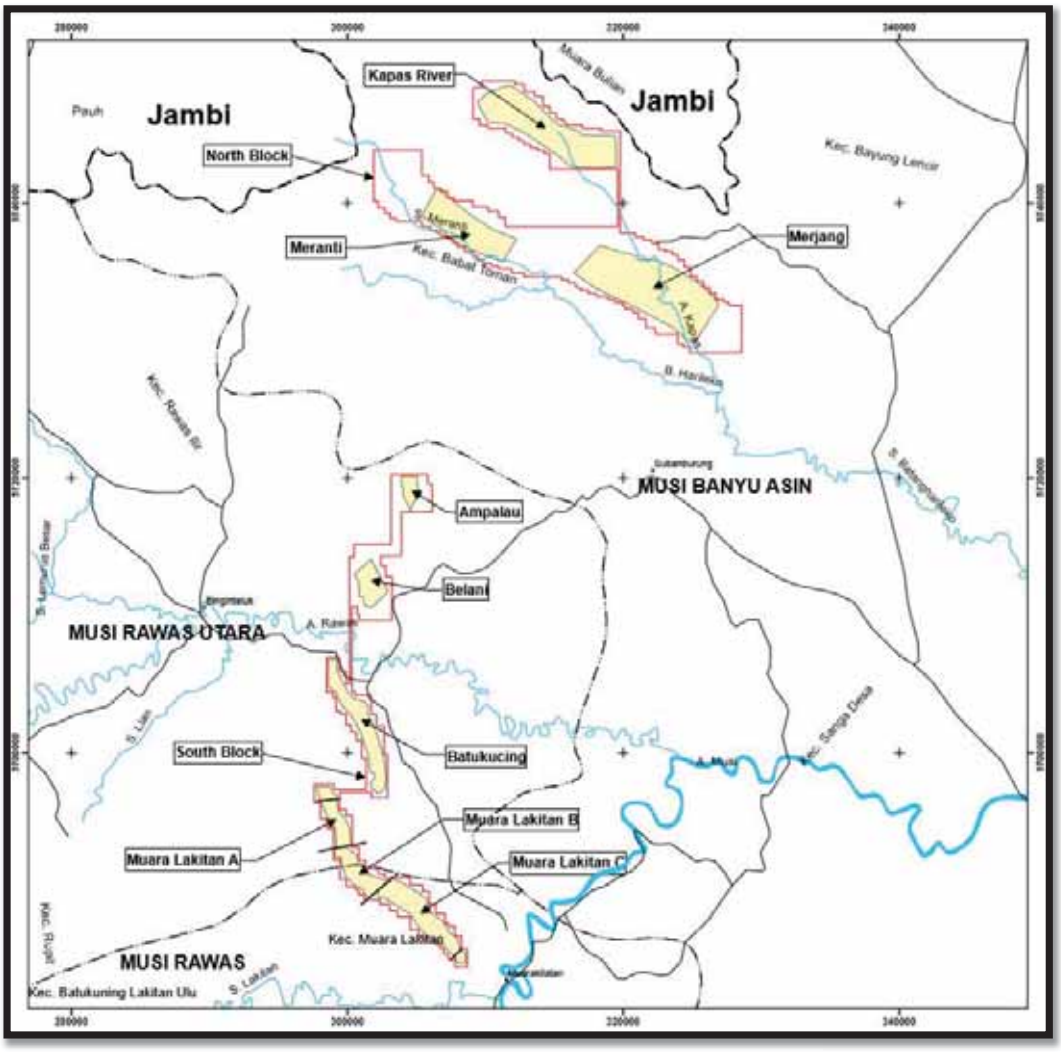
The BSL Project consists of two sub-blocks, namely north and south blocks, covering a total area of 23,300Ha.

Exploration to date has concentrated on the South Block (~ 3200 Ha) where four sub-blocks prospective for coal (Figure 3:2) have been identified:

- Muara Lakitan (ML);
- Batukucing (BK);
- Belani (BL); and
- Ampalau.

SALVA
Mining Consultants

Figure 3:2 Project Location



Muara Lakitan (ML Block) is approximately 5 km north of the Musi River at its closest point and is approximately 400 km upstream from the offshore transhipment port at the mouth of the Musi River. Most of the exploration drilling had been carried out on Muara Lakitan during 2004-09 and a total of 36,100 m drilling was completed involving 452 boreholes. Muara Lakitan covers an area of approximately 3,200 Ha.

Batukucing Block (BK Block) covers an area of approximately 1,793 Ha. Batukucing is approximately 24 km north of the Musi River at its closest point and is approximately 400 km upstream from the offshore transhipment port at the mouth of the Musi River. Most of the exploration drilling had been carried out on BK Block during 2008-09.

Belani (BL Block) which covers an area of approximately 1,574 Ha is approximately 3 km north of the Rawas River at its closest point and is approximately 400 km upstream from the offshore transhipment port at the mouth of the Musi River. Detailed exploration drilling was completed in 2009 at Belani North Block, and in 2010 at Belani South.

This Report only deals with the Coal Resources and Reserves estimated within the ML, BK and BL coal deposit within the BSL South Block Concession.

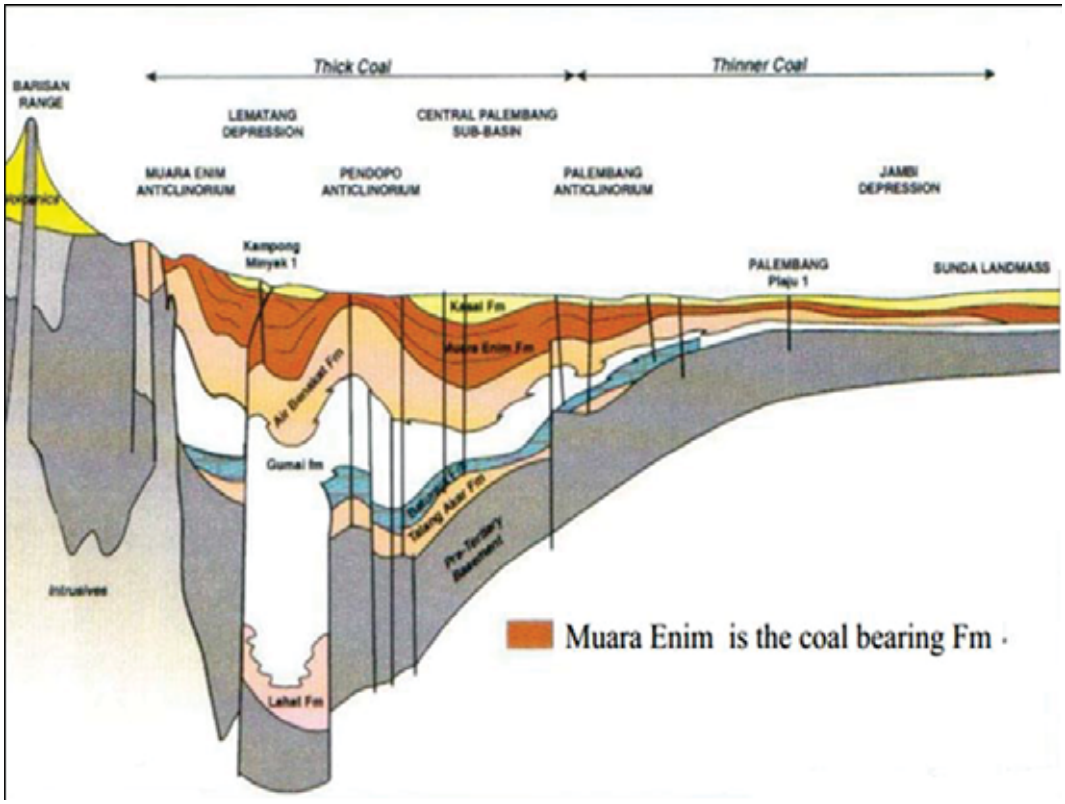
SALVA
Mining Consultants

4 Geology

4.1 Regional Geology

The late Miocene to Pliocene Muara Enim Formation ("Muara Enim Fm") is the main coal bearing formation present in the South Sumatra basin (Figure 4:1). The thickness of this formation, in the area around Muara Enim and Lahat, is around 500-700m.The thickness of individual coal seams varies with the thickness of the formation, typically varying between 10 m to 30 m in thickness, with shallow marine clays at the base, and shoreline and delta plain facies (sand, clay, coal) at the top. The coal present in most of the basin is of low rank. However, close to diorite intrusions, like in the case of the mines of PTBA, these low rank coals have been transferred into high rank coals. The Muara Enim Fm has been divided into 4 sub formations (M-1 to M-4) and contains 12 different coal seams of maximum thickness up to 30- 35 metres. The soft nature of the coal and overburden eliminates the requirement of blasting in many places.

Figure 4:1 Regional Geology - South Sumatra Basin



Source: Koesoemadinata, 1978

SALVA Mining Consultants

4.2 Local Geology - Muara Lakitan (ML Block)

The coal resources occur in the Miocene age, Lower Muara Enim Formation. The deposit has multiple coal seams with up to ten seams identified from Seam 200 to Seam 1050, in descending stratigraphic order (denoted I_200 to I_1050 in Minescape respectively for modelling purposes) with multiple sub-seams and seam splits. For modelling purposes, individual elements were modelled without the need for compound intervals. Coal seam statistics based on the drill hole database used in the model are presented in Table 4:1.

Table 4:1 ML Block - Coal Seam Statistics

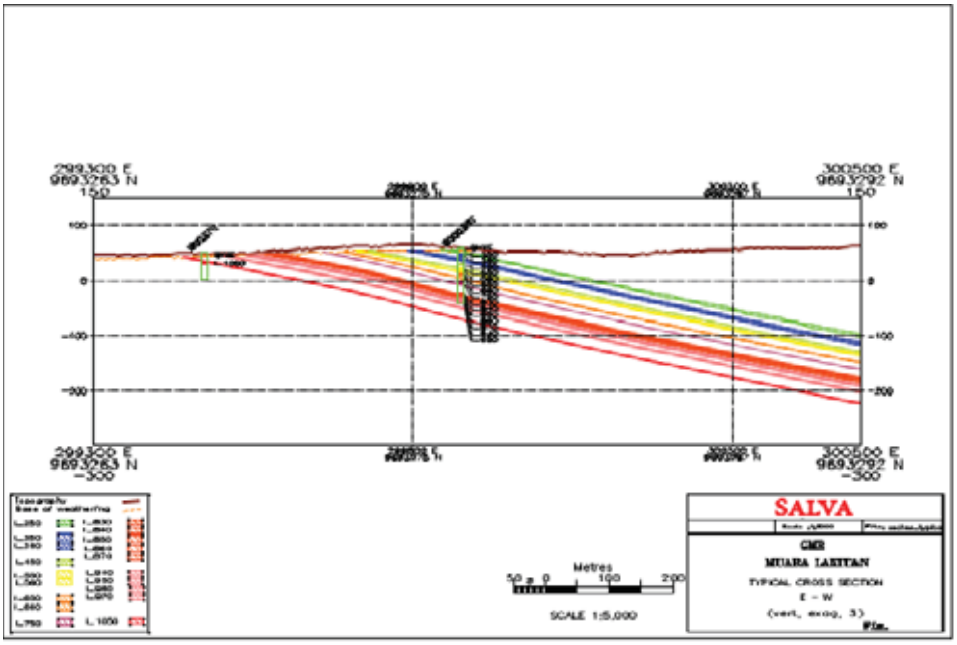
Interval	Number of data Points	Minimum		Maximum		Mean	S.D.
		Drill Hole no.	Thickness	Drill Hole no.	Thickness	Thickness	
I_250	17	B0114AT	0.20	MLC064	1.20	0.594	0.282
I_350	50	MLC064	0.30	ML017	4.35	1.501	0.825
I_360	47	ML017	0.25	ML007	3.60	1.860	0.556
I_450	58	B0070H	0.20	MLC067	1.50	0.797	0.297
I_550	60	B0125AT	0.30	MLC067	6.80	1.190	0.815
I_560	54	B0024T	0.20	MLC063	1.00	0.466	0.196
I_650	59	B0096H	0.25	B0036T	1.40	0.868	0.364
I_660	31	B0149BT	0.20	MLC060	2.00	0.563	0.343
I_750	70	B0111T	0.20	B0130T	3.15	0.702	0.579
I_830	61	B0050H	0.20	ML057	1.30	0.470	0.268
I_840	81	B0107T	0.25	ML009	1.30	0.711	0.211
I_850	72	ML051	0.30	MLC067	2.40	1.253	0.397
I_860	102	B0083H	0.20	B0056AH	4.45	0.872	0.547
I_870	122	B0056AH	0.25	ML046	14.50	2.540	1.477
I_940	113	B0030AH	0.15	ML024	2.30	0.825	0.359
I_950	135	B0098T	0.30	ML034	9.90	4.112	1.879
I_960	90	B0006T	0.05	ML037	6.90	1.251	0.785
I_970	89	B0086H	0.20	ML047C	5.79	2.634	0.945
I_1050	64	ML016	0.35	B0069G	2.60	1.964	0.453

The in-situ coal is of lignite rank, with high Total Moisture (average TM 36.2%), low Calorific Value (CV 5,015 kcal/kg air dried basis), low ash (average 5.3%) and low sulphur (average 0.3%).

Seam dips are relatively consistent in Muara Lakitan and are typically of the order of 15 to 20 degrees to the northeast. The Muara Lakitan is bounded to the north and south by major northwest trending transverse faults and is sub-divided into a number of sub-blocks by smaller scale sub-parallel faults. A Typical EW cross-section across the deposit is shown in Figure 4:2.

SALVA
Mining Consultants

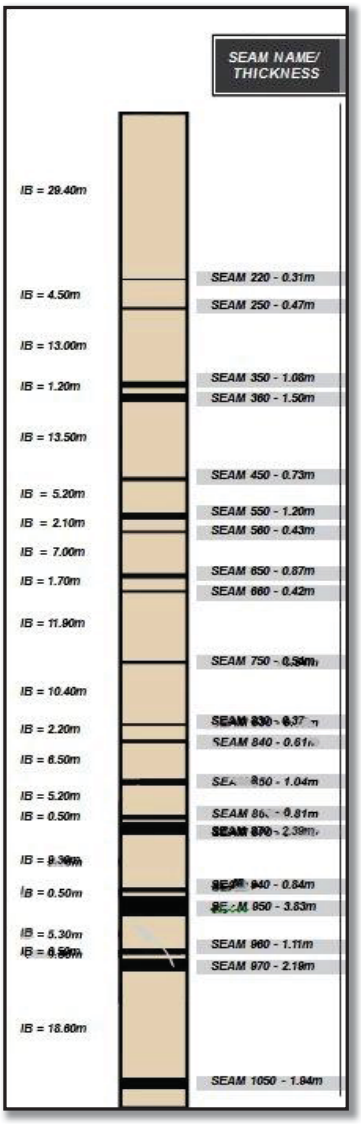
Figure 4:2 ML Block - Typical E-W Cross Section



A generalised stratigraphic column is shown in Figure 4:3.

SALVA
Mining Consultants

Figure 4:3 ML Block - Generalised Stratigraphic Column



Source: Adopted from Minarco, 2008

SALVA Mining Consultants

4.3 Local Geology – Belani (BL) Sub-block

The deposit has multiple coal seams with eleven different coal seams and their sub seams identified at Belani. These seams have a combined strike length of over 4km.The main seams out of the total package have been named as E420, E410, E720, E710, E820, E810, E920 and E910 (in descending stratigraphic order). Out of these coal seams, the two thickest seams, Seam 420 and Seam 910, have an average thickness of 5.28m and 12.05m respectively.

As indicated in the table below, Seams E400, E800 and E900 show consistency in terms of seam thickness and splitting. The average and range of thickness by seam is shown on Table 4:2 below.

Table 4:2 BL Block - Coal Seam Statistics

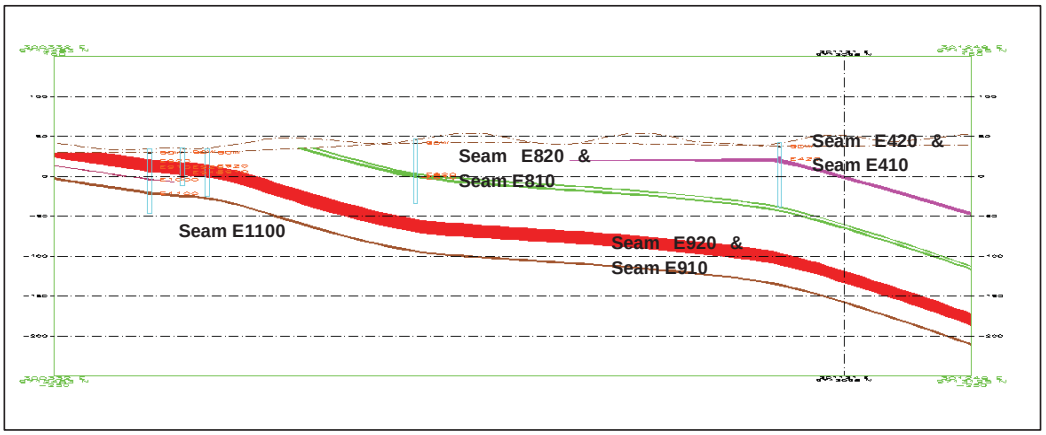
Interval	Number of data Points	Minimum		Maximum		Mean	S.D.
		Drill Hole no.	Thickness	Drill Hole no.	Thickness	Thickness	
E120	1	BL18	0.7	BL18	0.7	0.7	-
E110	1	BL18	0.7	BL18	0.7	0.7	-
E220	4	BL01	0.7	BL18	1.2	0.93	0.21
E210	4	BL28	0.6	BL01	2.6	1.15	0.97
E320	3	BL03	0.6	BL28	1.2	0.97	0.32
E310	4	BL04	0.8	BL28	2.2	1.75	0.66
E420	18	BL09	4.5	BL26	6.25	5.27	0.45
E410	11	BL29	0.5	BL16	1	0.71	0.17
E500	3	BL20	0.52	BL15	0.84	0.69	0.16
E600	5	BL20	0.74	BL37	1.72	1.18	0.36
E720	10	CKBL3	1.5	B009	5.6	3.43	1.22
E710	10	BL21B	0.42	CKBL3	3.1	1.61	0.88
E820	21	BL14B	0.55	BL35	1.9	1.44	0.41
E810	20	BL14B	0.6	CKBL6	3	2.49	0.49
E920	25	BL21A	0.89	CKBL1	6.55	2.23	0.99
E910	28	CKBL1	3.3	B006	19.95	12.05	2.81
E1000	10	BL11	0.5	GTB001	2	1.07	0.4
E1100	10	BL34	2.24	BL12	2.63	2.48	0.15

The in-situ coal is of sub-bituminous rank of estimated product quality with high Total Moisture (average TM 28.2%), low Calorific Value (CV 5,194 kcal/kg air dried basis, adb), low ash (average 4.6%) and low sulphur (average 0.2%).

The Belani deposit is bounded to the north and south by major northwest trending transverse faults. Seams generally dip to the east at approximately 23 degrees. A typical cross-section across the deposit is shown in Figure 4:4.

SALVA
Mining Consultants

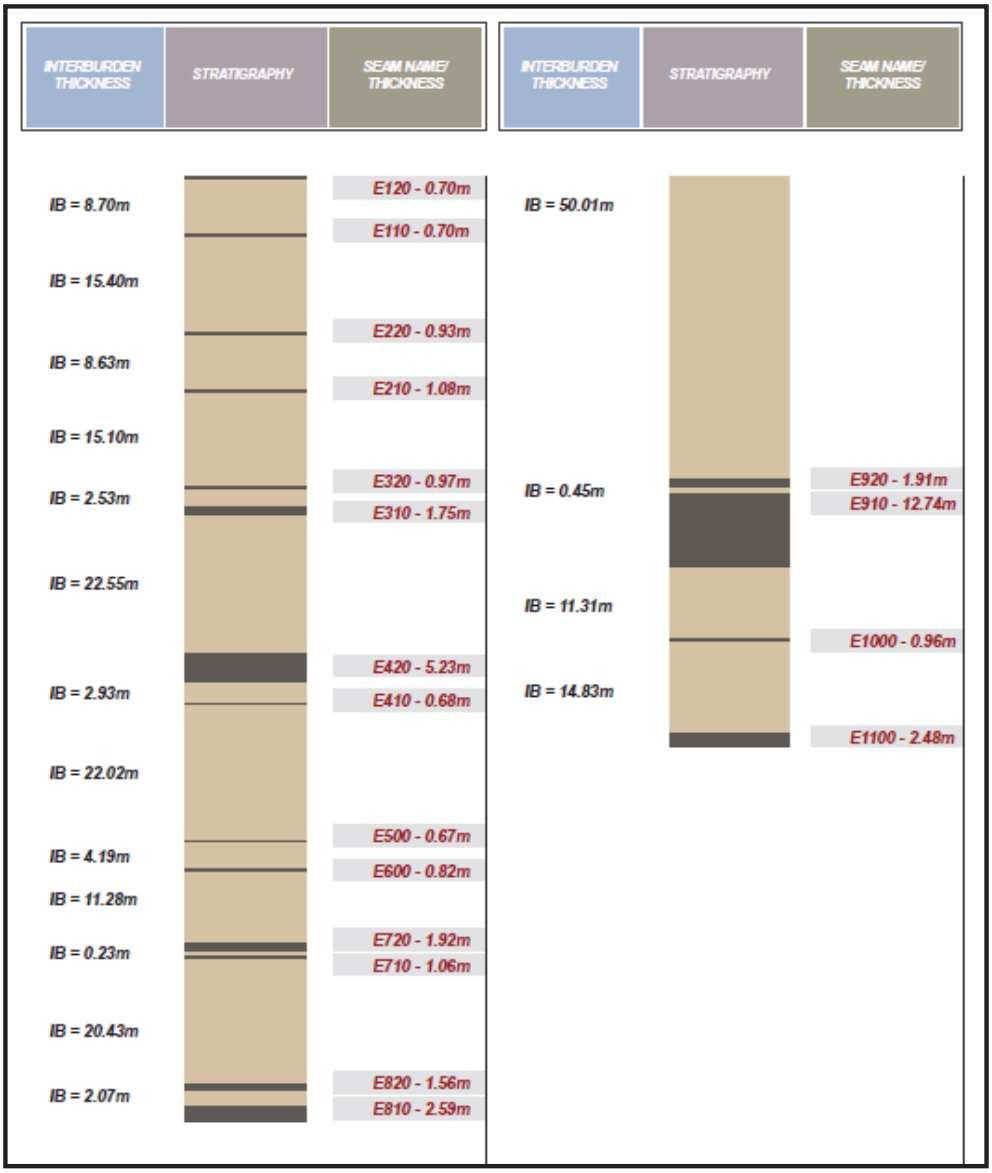
Figure 4:4 BL Block - Typical Cross Section



A generalised stratigraphic column is shown in Figure 4:5.

SALVA
Mining Consultants

Figure 4:5 BL Block - Generalised Stratigraphic Column



Source: Adopted from Minarco, 2008

SALVA
Mining Consultants

4.4 Local Geology – Batukucing (BK) Sub Block

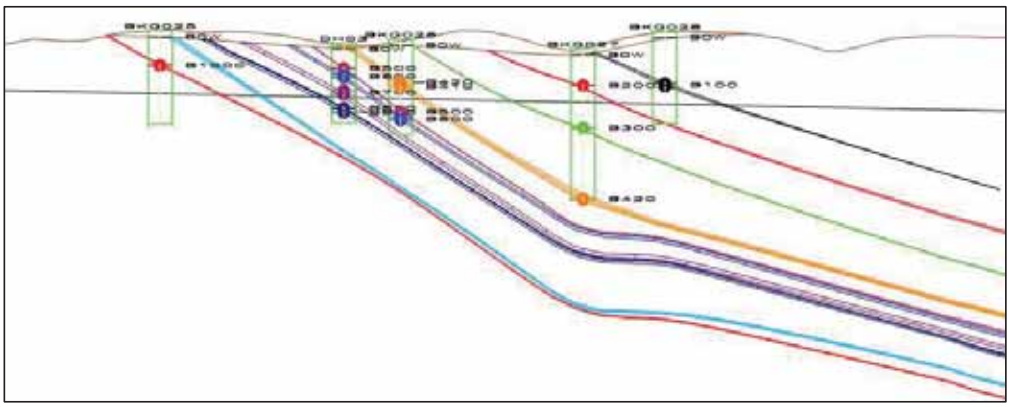
The Batukucing coal deposit is believed to be of Miocene age. The coal exists within the Maura Enim Formation. A total of 10 seams have been identified with a number of plies (seam splits) identified. 9 of these plies have been identified as viable, within the Batukucing tenement, occurring over a strike length of over 4km.These coal plies have been named: E420, E410, E500, E600, E700, E820, E810, E920 and E910 (in descending stratigraphic order). Out of these, B600, B700, B810, and B910 average 2.7m, 2.4m, 2.7m, and 3.6m in thickness respectively, whilst other target seams typically range from 1.0m to 2.5m. Detailed seam thicknesses are shown in Table 4:3.

Table 4:3 BK Block - Coal Seam Statistics

Interval	Number of data Points	Minimum		Maximum		Mean	S.D.
		Drill Hole no.	Thickness	Drill Hole no.	Thickness	Thickness	
B100	2	BKG036	0.74	BKG028	3.20	1.97	1.739
B200	11	BKG023	0.24	BKG024	4.50	2.54	1.656
B300	11	BKG027	0.40	BB11C	0.80	0.61	0.123
B420	20	BKG023	0.16	BKG038C	3.90	2.30	0.975
B410	18	BKG023	0.06	BKG038	4.50	1.74	1.474
B500	26	BKG061C	0.30	BKG039C	2.05	1.09	0.420
B600	26	BKG061C	0.70	BKG041A	3.70	2.68	0.627
B700	35	BKG054	0.24	BKG030	4.80	2.39	1.237
B820	12	BKG047	0.25	BKG039C	3.00	1.31	0.757
B810	11	BKG039C	1.05	BKG019	4.40	2.71	1.009
B920	10	BKG038	0.40	BKG021C	2.01	1.08	0.539
B910	11	BKG021C	2.67	BKG038C	4.15	3.64	0.459
B1000	18	BB10	0.50	BKG052	2.95	1.34	0.638

A typical cross-section across the deposit is shown on Figure 4:6.

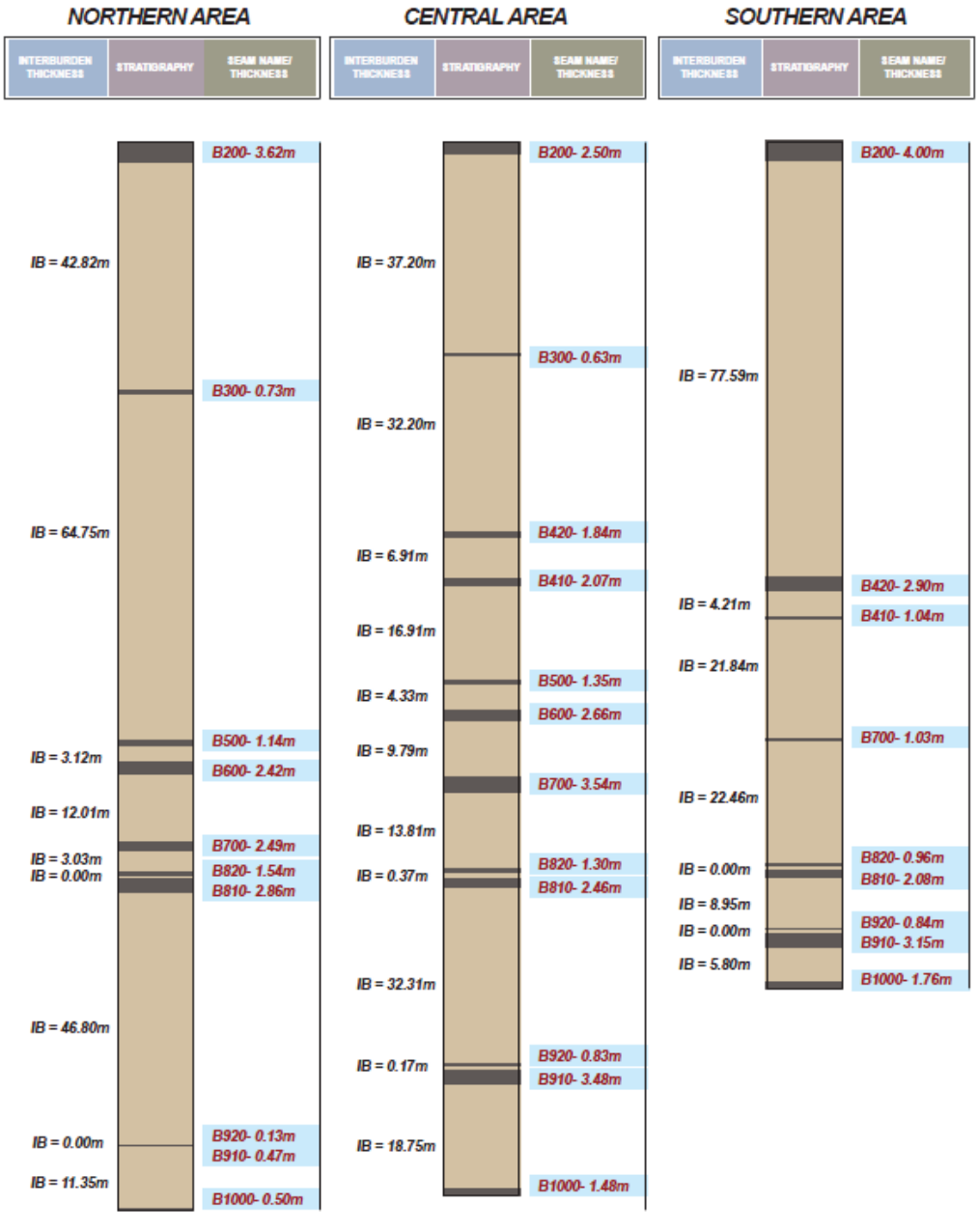
Figure 4:6 BK Block - Typical NE-SW Cross Section



The in-situ coal is of sub-bituminous rank, with average in situ coal quality as follows: Total Moisture (TM) as received is 33.7% (ar), Calorific Value (CV) gross as received is 5,797 kcal/kg (adb), Ash is 6.6% (adb) and Total Sulphur (TS) is 0.6% (adb).

A generalised stratigraphic column is shown in Figure 4:7.

Figure 4:7 BK Block - Generalised Stratigraphic Column



SALVA Mining Consultants

5 Geological Database and Modelling

5.1 Muara Lakitan (ML)

5.1.1 Geological Data

The geological data used in resource modelling was independently reviewed by Salva Mining's geologists and is considered appropriate and reasonable for the purpose of estimating Coal Resources. Salva Mining conducted a detailed review of the geological data supplied, including geophysical log interpretation and verification of seam correlations.

The key outcomes from the data review are as follows

- a total of 452 drillholes were drilled;
- 164 drillholes (11,700 m) were drilled in 2004-2005 at Muara Lakitan by Banpu;
- holes were drilled on drill lines at 250 m spacing in Block B and at 500m drill spacing at Block C;
- out of 164, a total of 103 holes were" touch" cored;
- in addition to 164 drillholes, another 78 holes (16,100 m) were drilled by DSI in 2007;
- holes were drilled on infill drill lines at 250 m spacing in Block C and at 500m drill spacing at Block A;
- out of these additional 78 holes, a total of 6 holes were partly cored to obtain check samples for analyses;
- after 2008, additional 210 drillholes were drilled in which 129 were quality drillholes;
- coal samples were typically analysed for the following suite of analyses - Total Moisture, proximate Analysis, Total Sulphur, Calorific Value and RD,

Table 5:1 ML Block – Summary of Drilling Data

BH Series	No. of Holes	Type	Geophysical Logging	Quality
B	164	Old	152	103
ML	60	New	60	0
MLC	18	BKA	0	0
PI	67	After 2008	49	63
PS	132	After 2008	85	62
TW	5	After 2008	0	4
GT	6	After 2008	3	0
Total	452		349	232

Out of the total 452 drillholes, a total of 349 holes have been geophysically logged for Gamma, Density and Calliper. Recent drilling by DSI included open hole drilling and geophysically logging of all holes. Selected holes were twinned and partly cored. Drilling depths for most of the drill holes is down to 120m depth. Previously drilled Banpu drill holes involved open hole drilling, geophysical logging and coring of intersected seams. In Salva Mining's opinion, the data is overall of a high standard, as all drill holes at Muara Lakitan were geophysically logged, the interpretation of the geophysical logs is good and detailed seam correlations have been carried out on the basis of this geophysical data.

Salva Mining has verified seam picks against the geophysical logs provided. It should be noted that only a portion of the geophysical logs were supplied to Salva Mining, i.e. Salva Mining does not possess a complete set of geophysical logs for all holes which were in fact geophysically logged. This is not considered material to the validity of the estimate as the geophysical logs supplied were sufficient to check seam correlations, given the relatively consistent seam correlations between holes exhibited by the deposit.

5.1.2 Survey

Detailed topographic survey has been conducted over the entire study area by aerial LIDAR survey. All drill holes have surveyed collar positions. An accurate topographic DTM model for the area was constructed by Salva Mining, from the topography uncut grid as obtained from the Minex model produced by Minarco-Mine Consultant Pty Ltd (Minarco) and supplied to client. The drill hole collar file, seam pick and coal quality data files supplied by client were imported into Minescape Stratmodel to build the structural coal quality models.

5.1.3 Coal Density

The coal quality data supplied by client was used by Salva Mining to construct the coal quality model. The air-dried density contained within the composited raw coal quality for each seam was used to determine in situ tonnages per seam.

5.1.4 Data Validation

All holes with geophysical data were reviewed for seam pick validation. Out of 242 holes, a total of 7 drill holes could not be used in the model due to the fact that seam pick information was not supplied for these holes.

A total of 496 samples were provided with raw coal quality information, namely: TM, IM, ASH, VM, FC, SU, CV and RD. Summary statistics of drill holes used in the model are provided in the Table 5:2.

5.1.5 Coal Quality

Average coal qualities for all seams are given in Table 5:2. A minimum of two coal quality data points with relatively consistent quality is considered minimum criteria for resource classification. The coal quality is consistent between Block A in the north and Block C in the south.

A total of 452 drillholes were drilled including 164 previous holes by Banpu. A total of 102 Banpu drillholes were touch cored and detailed ply by ply sampling was conducted. All samples were analysed for Total Moisture (TM), Inherent Moisture (IM), Ash Content (Ash), TS, CV and Relative Density (RD) and a significant number of samples were tested for Ash Fusion Temperature (AFT), Ash Analysis (AA) and Ultimate Analysis (UA). Sample preparation and sampling was done in accordance with the appropriate ASTM standards by PT Geoservices laboratories in Bandung, Indonesia.

DSI undertook drilling of 6 partly cored holes to confirm reliability of drill data by Banpu. The previous drill data was determined to be consistent with the recent results.

SALVA Mining Consultants

Table 5:2 ML Block - Summary of Coal Quality by Seam

Seam	Seam Quality									
	Category	ASH % adb	CV cal/g adb	FC % adb	HGI	IM % adb	RD g/cc adb	SU %	TM % adb	VM % adb
350	Valid Rows	20	20	20		20	20	20	20	20
	Min	2	4404	33		14	1	0	26	34
	Max	13	5472	39		25	2	0	43	45
	Mean	4	5032	37		20	1	0	36	39
360	Valid Rows	21	21	21	1	21	21	21	21	21
	Min	2	2098	17	35	6	1	0	26	0
	Max	60	5397	65	35	29	2	0	42	42
	Mean	8	4759	36	35	20	1	0	37	35
450	Valid Rows	19	19	19	1	19	19	19	19	19
	Min	2	3306	23	51	13	1	0	24	29
	Max	28	5459	42	51	28	2	2	50	43
	Mean	8	4771	34	51	20	1	0	37	37
550	Valid Rows	26	26	26	2	26	26	26	26	26
	Min	2	4557	31	35	15	1	0	26	34
	Max	11	5587	39	37	29	2	1	42	43
	Mean	5	5019	35	36	21	1	0	37	39
560	Valid Rows	17	17	17	1	17	17	17	17	17
	Min	4	4523	31	37	14	1	0	28	34
	Max	15	5313	39	37	28	2	1	42	43
	Mean	6	4968	36	37	20	1	0	36	39
650	Valid Rows	23	23	23	1	23	23	23	23	23
	Min	2	3353	22	36	13	1	0	22	29
	Max	33	5587	40	36	28	2	3	53	44
	Mean	8	4856	34	36	20	1	1	35	38
660	Valid Rows	7	7	7		7	7	7	7	7
	Min	3	3213	24		12	1	0	24	31
	Max	33	5050	37		25	2	3	44	41
	Mean	11	4563	32		20	1	1	37	37
750	Valid Rows	14	14	14	1	14	14	14	14	14
	Min	3	3178	21	62	12	1	0	24	29
	Max	35	5290	40	62	29	2	2	46	40
	Mean	16	4323	31	62	18	1	1	37	35
830	Valid Rows	7	7	7	1	7	7	7	7	7
	Min	6	2711	17	58	16	1	0	25	23
	Max	39	5212	39	58	24	2	1	42	44
	Mean	16	4180	27	58	20	1	0	35	37
840	Valid Rows	25	25	25	5	25	25	25	25	25
	Min	2	3503	26	32	14	1	0	28	28

SALVA Mining Consultants

Seam	Seam Quality									
	Category	ASH % adb	CV cal/g adb	FC % adb	HGI	IM % adb	RD g/cc adb	SU %	TM % adb	VM % adb
	Max	32	5457	40	54	28	2	1	58	41
	Mean	6	4863	35	42	22	1	0	38	37
850	Valid Rows	25	25	25	4	25	25	25	25	25
	Min	2	4425	32	40	15	1	0	28	33
	Max	14	5839	39	54	28	1	0	58	46
	Mean	4	4980	37	44	21	1	0	39	38
860	Valid Rows	36	36	36	7	36	36	36	36	36
	Min	1	4032	28	42	14	1	0	25	31
	Max	24	5681	41	55	28	2	0	57	43
	Mean	4	5072	37	48	21	1	0	37	39
870	Valid Rows	48	48	48	8	48	48	48	48	48
	Min	1	4426	32	42	13	1	0	25	35
	Max	13	5587	45	59	27	2	0	47	47
	Mean	4	5116	37	48	20	1	0	37	39
940	Valid Rows	41	41	41	8	41	41	41	41	41
	Min	1	2379	22	40	13	1	0	23	23
	Max	42	5720	54	59	30	2	0	42	47
	Mean	4	5130	37	49	20	1	0	35	40
950	Valid Rows	53	53	53	10	53	53	53	53	53
	Min	1	4626	32	40	13	1	0	18	35
	Max	9	5604	42	57	29	1	1	42	45
	Mean	3	5195	37	50	20	1	0	36	40
960	Valid Rows	39	39	39	7	39	39	39	39	39
	Min	1	3907	28	40	12	1	0	0	31
	Max	22	5756	40	75	26	2	1	44	44
	Mean	5	5137	36	53	19	1	0	35	39
970	Valid Rows	43	43	43	8	43	43	43	43	43
	Min	1	3094	24	40	13	1	0	26	26
	Max	38	5664	40	57	28	2	1	50	45
	Mean	5	5142	36	51	20	1	0	36	39
1050	Valid Rows	31	31	31	4	31	31	31	31	31
	Min	1	3436	26	37	16	1	0	20	29
	Max	30	5380	40	46	28	2	1	42	42
	Mean	6	4979	37	42	21	1	0	36	37
All Seams	Average	4.9	4894	35	46	20	1.38	0.30	36	38

Table 5:3 shows the number of drill hole intersections sampled for coal quality for each seam and used in coal quality modelling.

SALVA Mining Consultants

Table 5:3 ML Block - Coal Sampling Summary

Seam	Number of holes sampled
350	21
360	21
450	19
550	26
560	17
650	23
660	7
750	14
830	7
840	25
850	25
860	36
870	48
940	41
950	53
960	39
970	43
1050	31

5.2 Belani (BL)

5.2.1 Geological Data

The geological data used in resource modelling was independently reviewed by Salva Mining's geologists and is considered appropriate and reasonable for the purpose of estimating Coal Resources. A total of 98 drill holes were available for model construction from the data supplied by the client. The data was reviewed by Salva Mining, validating seam picks and correlations based on geophysical logs. During model construction, as part of the QAQC requirements set out by the JORC Code (2012), data pertaining to some drill holes was rejected as not being suitable for resource modelling purposes (Table 5:4).

Most of the holes drilled were geophysically logged. However, three drill holes could not be geophysically logged because of hole collapse. Holes drilled during the 2008 - 2009 drilling programs have been geophysically logged for Gamma, Density and Calliper. Lithological logged depths have been corrected to geophysically logged depths to ensure consistency and perform correlations.

It should be noted that only a portion of the geophysical logs were supplied to Salva Mining, i.e. Salva Mining does not possess a complete set of geophysical logs for all holes which were in fact geophysically logged. This is not considered material to the validity of the estimate as the geophysical logs supplied were sufficient to check seam correlations, given the relatively consistent seam correlations between holes exhibited by the deposit.

The data was reviewed for accuracy and consistency. The highlights from the data review are as below:

- A total of 67 holes were drilled with a total of 4,500 m from December 2008 to February 2009;
- Coal exploration within the Belani Block has been carried out on drill lines spaced at 500m apart. There has been limited infill drilling at 250m spacing;
- The exploration programme involved mainly open hole drilling with twinned holes for the purpose of coring to obtain coal quality data;
- 48 holes were drilled as open holes;
- all holes were geophysical logged, with the exception of three which had collapsed and detailed seam correlations and seam picks were carried;
- an additional nine "twin" holes (457 m) were partly cored for coal quality sampling of the main seams;
- An additional 11 partly cored holes were drilled in 2010 in Belani South;
- most of the holes were drilled to depth greater than 67m;
- the drilling was conducted on 7 parallel lines 500m apart, with a limited number of infill drill lines at 250 m spacing to confirm coal continuity;
- drill cores were sampled on a "ply-by-ply" basis based on geophysical logs and physical inspection of the cores;
- coal sample depths and thicknesses were reconciled against geophysical logs;
- Geophysical logging of most of the holes gives confidence in seam picks and correlations which are a preliminary step for coal resource estimation;
- Coring of twinned holes validated seam correlations done for open holes using geophysical data;
- Geophysics of the pilot hole was used for the twinned hole which had no geophysical log;
- Seams which have no coal quality data were applied a default quality as per the Stratmodel.

5.2.2 Survey

Detailed topographic survey has been conducted over the entire study area by aerial LIDAR survey instrument. All drill holes used have surveyed collar positions. An accurate topographic DTM model for the area was constructed by Salva Mining, from the topography uncut grid obtained from the Minex model produced by Minarco-Mine Consultant Pty Ltd (Minarco) and supplied to client. The drill hole collar file, seam pick file and coal quality data files supplied by client were imported into Minescape Stratmodel to build the structural and coal quality models.

5.2.3 Coal Density

The coal quality data supplied by client was used by Salva Mining to construct the coal quality model. The air-dried density contained within the composited raw coal quality for each seam was used to determine in situ tonnages per seam.

SALVA Mining Consultants

5.2.4 Data Validation

All holes with down hole geophysical data were reviewed for seam picks. Out of 98 holes a total of 22 drill holes could not be used in the model (Table 5:4). The elevation values for CKBL series holes were calculated from the topography DTM, as obtained from Minex grid, as the collar RL values supplied did not match the topography model.

Table 5:4 BL Block – Summary of Drilling Data

Drill holes used in structural model	Drill holes used in structure model	Drill holes not used in structure model	Total Drill holes with CQ data	Drill holes used in CQ model	Drill holes not used in CQ model
98	76	22	13 (45 samples)	12 (43 samples)	1

Coal quality results could not be used for hole CKBL5 as this hole does not have correct seam correlations when compared with the surrounding holes.

Most of the coal quality data contain samples representing compound seams instead of the elemental seams. The coal quality samples from CKBL5 were discarded due to correlation issues. The remainder of the samples representing compound seams were split proportionately to represent elemental seams. This resulted in a total of 45 CQ samples. Appendix C contains a list of all 45 samples and explaining which of these were used in the model, giving reasons why those not used could not be used.

5.2.5 Coal Quality

Average coal qualities for all seams are given in Table 5:5. A total of nine "twin" cored drill-holes were drilled and detailed ply by ply sampling was conducted. Seams sampled included Seams E400, E700, E800 and E900. Some seam outcrop coal quality data was used in the quality model. The CQ data from the outcrops was assigned a dummy hole status to be used in the structural model and thus contributing to the data for reporting the total resources. All samples were analysed for Total Moisture (TM), Inherent Moisture (IM), Ash Content (Ash), TS, CV and Relative Density (RD). Sample preparation and sampling was done in accordance with the appropriate ASTM standards by PT Geoservices laboratories in Bandung, Indonesia.

Table 5:5 BL Block – Summary of Coal Quality by Seam

SEAM	Seam Quality								
	Category	Ash	CV	FC	IM	RD	SU	TM	VM
		% adb	cal/g adb	% adb	% adb	g/cc adb	%	% adb	% adb
E420	Valid Rows	3	3	3	3	3	3	3	3
	Min	1.23	4785	32.24	15.2	1.30	0.12	29.93	35.35
	Max	4.91	5558	41.68	27.5	1.40	1.13	35.16	38.72
	Mean	3.53	5191	37.79	21.6	1.35	0.50	32.78	37.09
E410	Valid Rows	2	2	2	2	2	2	2	2
	Min	1.23	4909	32.7	22.1	1.30	0.12	29.93	36.4
	Max	2.30	5229	39.46	28.6	1.40	0.29	33.7	37.21

SALVA Mining Consultants

SEAM	Seam Quality								
	Category	Ash	CV	FC	IM	RD	SU	TM	VM
		% adb	cal/g adb	% adb	% adb	g/cc adb	%	% adb	% adb
	Mean	1.77	5069	36.08	25.4	1.35	0.20	31.82	36.81
E600	Valid Rows	2	2	2	2	2	2	2	2
	Min	0.96	5786	40.49	14.9	1.31	0.11	28.12	41.23
	Max	1.06	5922	42.46	17.2	1.32	0.24	31.96	41.71
	Mean	1.01	5854	41.48	16.0	1.31	0.17	30.04	41.47
E720	Valid Rows	3	3	3	3	3	3	3	3
	Min	2.40	4758	35.9	18.2	1.26	0.30	28.9	37.8
	Max	4.10	5620	38.7	23.7	1.36	1.79	31.3	40.3
	Mean	3.47	5299	36.9	20.6	1.33	0.83	30.43	39.1
E710	Valid Rows	2	2	2	2	2	2	2	2
	Min	3.90	5249	33.6	18.2	1.36	0.19	27.4	38.1
	Max	8.10	5519	38.7	20.3	1.36	0.30	31.1	39.2
	Mean	6.00	5384	36.15	19.3	1.36	0.25	29.25	38.65
E820	Valid Rows	5	5	5	5	5	5	5	5
	Min	6.70	4000	28.4	12.5	1.32	0.18	21.5	31.1
	Max	25.60	5700	37.5	19.3	1.45	4.26	35.2	43.1
	Mean	11.82	4693	34.72	16.2	1.41	2.33	28.24	37.24
E810	Valid Rows	5	5	5	5	5	5	5	5
	Min	2.60	4766	32.2	15.3	1.32	0.18	23.9	34.6
	Max	16.00	4924	38.7	22.5	1.43	0.45	30.2	40.3
	Mean	8.72	4857	35.3	18.5	1.37	0.28	27.7	37.52
E920	Valid Rows	5	5	5	5	5	5	5	5
	Min	3.60	4320	33.9	15.7	1.27	0.09	23	32.6
	Max	14.60	5325	38.8	22.0	1.40	0.36	29.49	39.2
	Mean	7.41	4903	36.37	19.6	1.35	0.16	27.02	36.62
E910	Valid Rows	6	6	6	6	6	6	6	6
	Min	1.80	4789	37.1	16.8	1.28	0.11	24.8	35.9
	Max	10.20	5517	39.2	21.9	1.33	0.15	30.18	41.6
	Mean	3.95	5154	38.32	18.9	1.31	0.13	27.2	38.82

There are no significant quality variations from the north to the south within the deposit, although there is some quality variation between seams, particularly higher ash plies (Seams E710, E810, E820 and E920) and lower ash plies (E410, E 420, E600, E720 and E910). Table 5:3 shows seams sampled from drill holes.

Table 5:6 BL Block - Coal Sampling Summary

Seam	Holes sampled
E420	CKBL4, RGT202203, TP06
E410	CKBL4, RGT202203
E600	RGT430, RGT600
E720	CKBL3, CKBL6, B009
E710	CKBL3, CKBL6
E820	CKBL1, CKBL6, B005, B007, B009
E810	CKBL1, CKBL6, B005, B007, B009
E920	CKBL1, CKBL3, B006, B009, GTB001

5.3 Batukucing Block (BK)

The Batukucing block has been subject to drilling in two stages, initially on drill lines at 500 m spacing with infill on 250 m drill lines across the main target seams. Plans, Sections and Resource Polygons. Drilling was principally open hole (136 holes, including 14 core holes and remaining chip holes) with all holes geophysically logged, with limited drilling of holes for coal quality sampling.

5.3.1 Geological Data

The geological data used in modelling was independently reviewed by Salva Mining's geologists and is considered appropriate and reasonable for the purpose of estimating Coal Resources. The data was reviewed by Salva Mining, validating seam picks and correlations based on geophysical logs. During model construction, as part of the QAQC requirements set out by the JORC Code (2012), data pertaining to some drill holes was rejected as not being suitable for resource modelling purposes (Table 5:7).

All open holes drilled were geophysically logged. However, it should be noted that only a portion of the geophysical logs were supplied to Salva Mining, i.e. Salva Mining does not possess a complete set of geophysical logs for all holes which were in fact geophysically logged. This is not considered material to the validity of the estimate as the geophysical logs supplied were sufficient to check seam correlations, given the relatively consistent seam correlations between holes exhibited by the deposit.

The key outcomes from the database review are as follows:

- A total of 122 chip holes (were drilled at Batukucing by PT Rekasindo Guriang Tandang (RGT) on behalf of DSI;
- 14 Quality holes (906 m) were partly cored for coal quality sampling of the main seams;
- all open holes were geophysically logged and detailed seam correlations were carried out on the basis of the geophysical logs;
- drill-holes were typically drilled to a depth of >60 m with a maximum drill depth of 72.5 m;
- holes were drilled on a total of 30 lines at 250 m spacing, except in a limited number of cases where local issues prevented drill access in which case drill line spacing is at 500 m;
- drill cores were sampled on a "ply-by-ply" basis based on geophysical logs and physical inspection of the cores; and

- coal sample depths and thicknesses were reconciled against geophysical logs.

Geophysical logging, which provides a high degree of certainty of data accuracy, was conducted in all open drill holes and a number of the coal quality holes. The typical suite of geophysical logs for coal exploration including natural gamma, in situ rock density (long and short) and calliper (borehole diameter) have been run. Data obtained includes seam depth and thickness, seam parting identification and seam correlations.

Overall the data used in the model is of a high standard, with the following observations:

- open hole drilling supplemented by geophysical logging gives a sufficient order of accuracy for Coal Resource estimation,
- open hole and geophysical log data was supplemented by coring a number of representative coal quality holes for the main seams.
- geophysical logging was not conducted on all cored holes and in such instances the geophysical log of an adjacent chip hole was used for coal sample reconciliation,
- some holes were removed from the model due to:
    - inability to reconcile survey with topography
    - poor quality or no geophysics available
    - large differences between core and pilot chip hole depths

5.3.2 Survey

A detailed topographic survey has been conducted over the entire study area by aerial LIDAR survey instrument. All drill holes used have surveyed collar positions. An accurate topographic DTM model for the area was constructed by Salva Mining from the topography uncut grid obtained from the Minex model produced by Minarco-Mine Consultant Pty Ltd ("Minarco") and supplied to the client. The drill hole collar file, seam pick file and coal quality data files supplied by the client were imported into Minescape Stratmodel to build the structural and coal quality models.

5.3.3 Coal Density

The coal quality data supplied by the client was used by Salva Mining to construct the coal quality model. The air-dried density contained within the composited raw coal quality for each seam was used to determine in situ tonnages per seam.

5.3.4 Data Validation

All holes with down hole geophysical data were reviewed for seam picks. Out of 136 holes a total of 75 drill holes could not be used in the model (Table 5:7).

Holes that were not used in the structural model were discarded for a number of reasons:

- 53 holes were removed due to lack of necessary geophysics;
- 1 hole was removed due to poor LAS quality;
- 2 chip holes were removed in preference of their twinned core holes due to differences between them;
- 1 hole was removed due to a survey error;
- 1 borehole was removed for a lack of lithology.

Holes were excluded from the Coal Quality Model because they were either originally excluded from the structural model or the coal quality provided was a copy of another hole, i.e., default values

were used. Note that 66 holes had coal quality information provided, though only 14 holes had actually been individually tested.

Table 5:7 Batukucing Block - Summary of Drilling Data

Total Drill holes available	Drill holes used in structure model	Drill holes not used in structure model	Total Drill holes with CQ data	Drill holes used in CQ model	Drill holes not used in CQ model
136	75	61	66 (170 samples)	13 (31 samples)	53

5.3.5 Coal Quality

A total of fourteen cored drill holes were drilled and detailed ply by ply sampling was conducted. Seams sampled included Seams E400, E700, E800 and E900 (see Table 5.8). All samples were analysed for TM, Inherent Moisture (IM), Ash Content (Ash), TS, CV and Relative Density (RD). Sample preparation and sampling was done in accordance with the appropriate ASTM standards by PT Geoservices laboratories in Bandung, Indonesia.). There are no significant quality variations from the north to the south within the deposit, although there is significant quality variation between the upper seams (seams down to E410) and the lower series of seams (seam E500 down).

Table 5:8 Batukucing Block - Summary of Coal Quality by Seam

SEAM	Seam Quality								
	Category	ASH	CV	FC	IM	RD	SU	TM	VM
		% adb	cal/g adb	% adb	% adb	g/cc adb	%	% adb	% adb
B420	Number	2	2	2	2	2	2	2	2
	Min	10	5306	38	11	1.4	0.7	33	38
	Max	12	5486	39	11	1.5	1.3	35	40
	Mean	11	5396	39	11	1.5	1	34	39
B410	Number	1	1	1	1	1	1	1	1
	Min	12	5306	39	11	1.4	0.7	33	38
	Max	12	5306	39	11	1.4	0.7	33	38
	Mean	12	5306	39	11	1.4	0.7	33	38
B500	Number	5	5	5	5	5	5	5	5
	Min	4	5883	36	7.9	1.4	0.3	30	43
	Max	7.7	6336	42	11	1.4	3.7	33	49
	Mean	5.5	6065	40	9.3	1.4	2.3	32	46
B600	Number	6	6	6	6	6	6	6	6
	Min	2.6	5752	41	9.3	1.4	0.2	32	41
	Max	7.6	6166	43	14	1.4	0.3	35	45
	Mean	5	5896	42	11	1.4	0.3	33	42
B700	Number	5	5	5	5	5	5	5	5

SALVA
Mining Consultants

SEAM	Seam Quality								
	Category	ASH	CV	FC	IM	RD	SU	TM	VM
		% adb	cal/g adb	% adb	% adb	g/cc adb	%	% adb	% adb
	Min	4.3	5502	41	8.3	1.4	0.2	33	38
	Max	8.7	5910	43	12	1.8	0.3	36	43
	Mean	6.3	5762	42	11	1.5	0.2	34	41
B820	Number	3	3	3	3	3	3	3	3
	Min	2.4	5804	41	9.6	1.4	0.2	33	42
	Max	4.5	6151	43	12	1.4	0.2	34	45
	Mean	3.4	5947	42	11	1.4	0.2	34	44
B810	Number	3	3	3	3	3	3	3	3
	Min	3.7	5804	41	8.9	1.4	0.1	33	42
	Max	6	5887	42	12	1.4	0.2	34	43
	Mean	4.8	5857	42	11	1.4	0.2	33	43
B920	Number	3	3	3	3	3	3	3	3
	Min	5.8	5836	38	8.6	1.4	0.2	31	43
	Max	7.7	5958	41	11	1.4	0.5	34	45
	Mean	7	5891	39	9.7	1.4	0.3	32	44
B910	Number	3	3	3	3	3	3	3	3
	Min	2.3	5836	40	8.4	1.4	0.2	31	43
	Max	7	6196	42	11	1.4	0.3	34	45
	Mean	5	6001	41	9.9	1.4	0.2	33	44

6 Resource Model Construction

6.1 Muara Lakitan (ML) Block

6.1.1 Structural model

Data was loaded into Minescape Stratmodel ("Stratmodel") to generate a structural model and coal quality model. The process involved the following steps:

- The structural model has been built using reliable drill holes, namely those which have verified seam pick information. A total of 235 holes are included in the model;
- Seam intersection data on a hole by hole basis was prepared as a lithology file. Collar and lithology files were imported into Stratmodel. Base of weathering was assumed to be 5 m below the topographic surface in all cases;
- An accurate topographic DTM model for the area was constructed by Salva Mining, from the topography uncut grid as obtained from Minex model produced by Minarco and supplied to the client. The drill hole collar file, seam pick file and coal quality data files were imported into Minescape Stratmodel to build the structural coal quality models.
- Schema modelled elements and modelling parameters used are shown in the tables below.

Table 6:1 shows the parameters used to construct the stratigraphic model using Minescape '*Stratmodel'* software.

Table 6:1 ML Block - Model Parameters

ML Block - Model Parameters	
Model Component	Value
Schema	ML_2017
Topography model	Topo_Model
Topo model cell size	20
Geology model cell size	20
Interpolator – thickness	FEM
Interpolator – surface	FEM
Interpolator – trend	FEM
Parting modelled	YES
Conformable sequences	Weathered, Permian
Upper limit for seams	BHWE
Control points	-
Constraint file	CON1
Penetration File	Pen
Model Faults	F1, F2, F3, F4, F5, F6, F7, F8

Table 6:2 shows the schema elements used to construct the structural model.

Table 6:2 ML Block - Schema Elements

ML Block - Model Stratigraphy	
Modelled Units	Unit Description
Topo_Model	Topography
BHWE	Base of Weathering
I_220	SEAM 220
I_250	SEAM 250
I_350	SEAM 350
I_360	SEAM 360
I_450	SEAM 450
I_550	SEAM 550
I_560	SEAM 560
I_650	SEAM 650
I_660	SEAM 660
I_750	SEAM 750
I_830	SEAM 830
I_840	SEAM 840
I_850	SEAM 850
I_860	SEAM 860
I_870	SEAM 870
I_940	SEAM 940
I_950	SEAM 950
I_960	SEAM 960
I_970	SEAM 970
I_1050	SEAM 1050

6.1.2 Coal Seams

The resource modelling process has identified I_800 group (I_830, I_840, I_850, I_860, I_870) and I_900 group (I_940, I_950, I_960 and I_970) as main seams in Muara Lakitan block. _**830 seam:** This is the top seam in the I_800 group, which occurs in a total of 61 drill holes, with an average thickness of 0.47m. When compared to other seams in the group, it is sparsely present in the northern, central and southern parts of the tenement. The minimum thickness is 0.20m (B0050H) and the maximum thickness is 1.30m (ML057).

I_840 seam: This seam occurs in a total of 81 drill holes, with an average thickness of 0.71m and is mostly found in drill holes drilled in the northern part of the tenement. In the southern the part it is only present in 10 drill holes. The minimum thickness is 0.25m (B0107T) and the maximum thickness is 1.30m (ML009).

I_850 seam: This seam occurs in a total of 72 drill holes, with an average thickness of 1.25m and is mostly found in drill holes drilled in northern part of the tenement. In the southern part, it is only present in 5 drill holes. The minimum thickness is 0.30m (ML051) and the maximum thickness is 2.40m (MLC067).

I_830 seam: This is the top seam in the I_800 group, which occurs in a total of 61 drill holes, with an average thickness of 0.47m. When compared to other seams in the group, it is sparsely present in the northern, central and southern parts of the tenement. The minimum thickness is 0.20m (B0050H) and the maximum thickness is 1.30m (ML057).

I_840 seam: This seam occurs in a total of 81 drill holes, with an average thickness of 0.71m and is mostly found in drill holes drilled in the northern part of the tenement. In the southern the part it is only present in 10 drill holes. The minimum thickness is 0.25m (B0107T) and the maximum thickness is 1.30m (ML009).

I_850 seam: This seam occurs in a total of 72 drill holes, with an average thickness of 1.25m and is mostly found in drill holes drilled in northern part of the tenement. In the southern part, it is only present in 5 drill holes. The minimum thickness is 0.30m (ML051) and the maximum thickness is 2.40m (MLC067).

I_860 seam: This seam occurs in total of 102 drill holes, with an average thickness of 0.87m. When compared to other three overlying seams in the group, it is more laterally extensive, being present across the entire tenement. The minimum thickness is 0.20m (B0083H) and the maximum thickness is 4.45m (B0056AH).

I_870 seam: This is bottom most and most prominent seam in I_800 group which is found in a total of 122 drill holes, with an average thickness of 2.54m. It is the most economic seam in the group due to its thickness and presence across the tenement with minimum thickness of 0.25m (B0056AH) and a maximum thickness of 14.40m (ML046).

I_940 seam: This is the top seam in I_900 group which is found in a total of 113 drill holes, with an average thickness of 0.82m. It is present in both northern and southern parts of the tenement with a gap in central area. The minimum thickness is 0.15m (B0030AH) and the maximum thickness is 2.30m (ML034).

I_950 seam: This is most prominent and therefore economic seam within the deposit and is found in a total of 135 drill holes, with an average thickness of 4.11m. It is present across the tenement with a minimum thickness of 0.30m (B0098T) and a maximum thickness of 9.90m (ML034).

I_960 seam: This seam is found in a total of 90 drill holes with an average thickness of 1.25m. It is present in both northern and southern parts of the tenement, with a gap in the central area. The minimum thickness is 0.05m (B0006T) and the maximum thickness is 6.90m (ML037).

I_970 seam: This is bottom most seam in I_900 group, which is found in total of 89 drill holes, with an average thickness of 2.63m. It is present in both northern and southern parts of the tenement, with a gap in the central area. The minimum thickness is 0.20m (B0086H) and the maximum thickness is 5.79m (ML047C).

6.1.3 Coal Quality Model

Quality data loaded into Stratmodel has been composited on a ply basis. All samples in the data were provided on a ply basis, with one sample per ply, which allowed the quality model to run on the same basis as the structural model elements. Modelling parameters for quality are:

- Model – ml_1305_raw
- Model type – Minescape Table and Grid
- Interpolator – Inverse distance, Power 2

The Inverse distance interpolator was selected for modelling coal quality as it has been shown to perform adequately for all but the most variable coal quality attributes and it is also well suited to smaller data sets.

6.2 Belani (BL) Block

6.2.1 Structural model

Data was loaded into Minescape Stratmodel ("Stratmodel") to generate a structural model and coal quality model. The process involved the following steps:

- The structural model has been built using only a selected suite of reliable drill holes, namely those which have verified seam pick information. A total of 76 holes are included in the model
- Seam intersection data on a hole by hole basis was prepared as a lithology file. Collar and lithology files were imported into Stratmodel. Base of weathering was assumed to be 5 m below the topographic surface in all cases based on previous work done by Minarco.
- An accurate topographic DTM model for the area was constructed by Salva Mining, from the uncut topography grid obtained from the Minex model produced by Minarco, supplied to the client. The drill hole collar file, seam pick file and coal quality data files were imported into Minescape Stratmodel to build the structural and coal quality models.
- Schema modelled elements and modelling parameters used are shown in the tables below.
- A standard maximum search radius distance for all coal seams was set at 5000m.

Table 6:3 shows the parameters used to construct the stratigraphic model using Minescape '*Stratmodel'* software.

Table 6:3 BL Block - Model Parameters

Model Parameters	
Model Component	Value
Schema	Belani_17
Topography model	Topo
Topo model cell size	20
Geology model cell size	20
Interpolator – thickness	FEM
Interpolator – surface	FEM
Interpolator – trend	FEM
Parting modelled	No
Conformable sequences	Weathered, Permian
Upper limit for seams	BHWE
Control points	_-
Constraint file	CON1
Penetration File	Pen5
Model Faults	-

Table 6:4 shows the schema elements used to construct the structural model.

Table 6:4 BL Block - Schema Elements

BL Block - Model Stratigraphy	
Modelled Units	Unit Description
Topo	Topography
BOW	Base of Weathering
E120	Seam E120
E110	Seam E110
E220	Seam E220
E210	Seam E210
E320	Seam E320
E310	Seam E310
E420	Seam E420
E410	Seam E410
E500	Seam E500
E600	Seam E600
E720	Seam E720
E710	Seam E710
E820	Seam E820
E810	Seam E810
E920	Seam E920
E910	Seam E910
E1000	Seam E1000
E1100	Seam E1100

6.2.2 Coal seams

This Resource modelling exercise has identified four main seams E400, E700, E800 and E900 in the Belani Block. The following is a description of the structural model for these main seams.

Seam E420

E420 is the upper ply of E400 which splits into Seams E420 and E410. E420 is present across the block with interburden thickness between E420 and E410 up to 3.75 m. Seam E420 is intersected by 18 drill holes. Seam E420 is regularly developed and averages 5.28m thick with a maximum thickness of 6.25 m.

Seam E410

Seam E410 is intersected in 11 open holes. The coal seam is regularly developed and averages 0.70 m thick with a maximum thickness of 1.00 m.

Seam E720

E700 is split into upper ply E720 and lower ply E710. The interburden thickness between E720 and E710 plies reaches up to 2.94 m. E720 is intersected in 10 drill holes, is irregularly developed and averages 3.43 m thick with a maximum thickness of 5.60 m.

Seam E710

Seam E710 is intersected in 10 drill holes. The coal seam is irregularly developed and averages 1.61 m thick with a maximum thickness of 3.10m.

Seam E820

Seam E820 is intercepted in 21 drill holes. The seam is regularly developed and averages 1.44 m thick with a maximum thickness of 1.90 m. E820 is present across the block with interburden thickness to E810 of up to 5.3 m.

Seam E810

Seam E810 is intersected in a total of 20 drill holes. The seam is regularly developed and averages 2.49 m thick with a maximum thickness of 3.00 m.

Seam E920

Seam E920 is intersected in 25 drill holes. E920 is present across the block with interburden thickness of up to 0.54 m between E920 and E910. The seam is regularly developed and averages 2.24 m thick with a maximum thickness of 6.55 m.

Seam E910

Seam E910 is intersected in 28 drill holes. The seam is well developed and averages 12.04m in thickness with a maximum thickness of 19.95m in hole B006. As this is the deepest seam classified as a resource and also the thickest seam in the resource, it is considered to be very important to the economic viability of the entire Belani project area.

6.2.3 Coal Quality Model

Quality data loaded into Stratmodel has been composited on a seam basis. Since some of the samples were analysed on a parent seam rather than split seam basis, the data has been further processed to assign the parent seam quality to each of its splits, in order to create a quality model on the same basis as the structural model elements. Modelling parameters for quality are:

- Model – belani_raw
- Model type – MineScape Table and Grid
- Interpolator – Inverse distance, Power 2

The Inverse distance interpolator was selected for modelling coal quality as it has been shown to perform adequately for all but the most variable coal quality attributes and it is also well suited to smaller data sets.

6.3 Batukucing (BK) Block

6.3.1 Structural Model

Data was loaded into Minescape Stratmodel ("Stratmodel") to generate a structural model and coal quality model. The process involved the following steps:

- The structural model has been built using only a selected suite of reliable drill holes, namely those which have verified seam pick information. A total of 81 holes are included in the model.
- Seam intersection data on a hole by hole basis was prepared as a lithology file with base of weathering. Collar and lithology files were imported into Stratmodel. Base of weathering was assumed to be 5 m below the topographic surface in all cases.
- An accurate topographic DTM model for the area was constructed by Salva Mining, from the uncut topography grid obtained from the Minex model produced by Minarco, supplied to GMR.
- Schema modelled elements and modelling parameters used are shown in the tables below.

Table 6:5 shows the parameters used to construct the stratigraphic model using Minescape 'Stratmodel' software.

Table 6:5 BK Block – Model Parameters

BK Block - Model Parameters	
Model Component	Value
Schema	Bt_17
Topography model	Topography
Topo model cell size	20
Geology model cell size	20
Interpolator - thickness	FEM
Interpolator - surface	FEM
Interpolator – trend	Planar
Parting modeled	No
Conformable sequences	Weathered, Fresh
Upper limit for seams	BOW
Control points	B700
Constraint file	Constraints.dat
Penetration File	Penetration.dat
Model Faults	None

Table 6:6 shows the schema elements used to construct the structural model.

Table 6:6 BK Block – Schema Elements

BK Block - Model Stratigraphy	
Modeled Units	Unit Description
Topography	Topography
BOW	Base of Weathering
B100	B100 Seam
B200	B200 Seam
B300	B300 Seam
B420	B420 Seam
B410	B410 Seam
B500	B500 Seam
B600	B600 Seam
B700	B700 Seam
B820	B820 Seam
B810	B810 Seam
B920	B920 Seam
B910	B910 Seam
B1000	B1000 Seam

6.3.2 Coal Seams

This Resource modelling exercise has identified the main seams in the Batukucing Block in terms of coal resources based on current drilling as B420, B410, B500, B600, B700, B820, B810, B920 and B910. The following is a description of the structural model for these main seams.

Seam B420

Seam B420 was intersected in 22 holes, 2 of which have coal quality results. The coal seam is well developed in the south (up to 3.60 m thick), but thins in the central area (typically 1.20 m to 1.80 m) and is missing in the far north.

Seam B410

Seam B410 was intersected in 18 holes, 1 with coal quality results. The coal seam is generally thin (< 1.00 m) in the south, becoming thicker in the central area (up to 4.70 m thick) and is missing in the north. As it only has one coal quality point, it cannot be used to generate any resource figures.

Seam B500

Seam B500 was intersected in 26 holes, 5 with coal quality results. The coal seam is relatively regular in thickness in the north and central areas (0.8 m to 1.35 m thick) with local thickening to around 2m in a small area, but is missing in the south. The seam typically has an overlying thinner "shaley" coal ply which has not been modelled.

Seam B600

Seam B600 was intersected in 26 holes, 6 of which have coal quality results. The coal seam is regular in thickness in the north and central areas, ranging from 2.3 m to 3.6 m thick, but is missing

in the south. The seam typically has an underlying thinner "shaley" coal ply which has not been modelled.

Seam B700

Seam B700 was intersected 36 holes, 5 of which have coal quality results. The coal seam is regularly developed with thicker coal in the north and central areas (up to 4.8 m thick), but splits and thins to the south where it is typically <1.00 m thick. The upper seam split is relatively thin and missing and therefore has not been modelled.

Seam B820

Seam B800 is split into an upper and lower ply (Seams B820 and B810 respectively) in the central area where the interburden thickness is up to 0.70 m. For modelling purposes this seam nomenclature has been applied over the whole block.

Seam B820 was intersected 13 holes, 3 of which have coal quality results. The seam is regularly developed over most of the block with thickness typically from 1.00 m to 1.70 m, but is missing in part of the southern area.

Seam B810

Seam B810 was intersected 12 holes, 3 of which have coal quality results. The seam is well developed in the north and central areas with thickness typically from 2.50 m to 3.00 m, and thins to the south where it is <2.00 m.

Seam B920

Seam B900 is split into an upper and lower ply (Seams B920 and B910 respectively) in the central area where the interburden thickness increases up to 0.50 m. For modelling purposes this seam nomenclature has been applied over the whole block.

Seam B920 was intersected 11 holes, 3 of which have coal quality results. The seam is poorly developed in the north where it is typically <0.30 m thick and in the central and south areas it typically ranges from 0.60 m to 1.30 m.

Seam B910

Seam B910 was intersected 12 holes, 3 of which have coal quality results. The seam is poorly developed in the north where it is typically <1.00 m thick but is generally well developed in the central and south areas where it typically ranges from 2.50 m 4.1 m.

6.3.3 Coal Quality Model

Quality data loaded into Stratmodel has been composited on a ply basis. All samples in the data were provided on a ply basis, with one sample per ply, which allowed the quality model to run on the same basis as the structural model elements. Modelling parameters for quality are:

- Model – bt_raw
- Model type – Minescape Table and Grid
- Interpolator – Inverse Distance, Power 2, radius 7,000 metres.

The Inverse distance interpolator was selected for modelling coal quality as it has been shown to perform adequately for all but the most variable coal quality attributes and it is also well suited to smaller data sets.

SALVA
Mining Consultants

7 Coal Resources

7.1 Geological Confidence and Resource Classification

Coal Resources present in the BSL coal deposit have been estimated in accordance with the JORC Code, 2012. The JORC Code identifies three levels of confidence in the reporting of resource categories. These categories are briefly explained below.

- **Measured** – ". *That part of a Mineral Resources of which the tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence*"
- **Indicated** – *"…That part of a Mineral Resources of which the tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence".*
- **Inferred** – *"…That part of a Mineral Resources of which the tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a low level of confidence".*

For the purpose of coal resource classification according to JORC Code (2012) Code, Salva Mining has considered a drill hole with a coal quality sample intersection and core recovery above 90% over the sampled interval as a valid point of observation.

In terms of Coal Resource classification, Salva Mining is also guided by the Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves (2014) (The Coal Guidelines) specifically referred to under clause 37 of the JORC Code (2012).

Based on due consideration of the continuity of the coal seams as observed in the geological models for each of the three resource areas, the relative lack of evidence for significant faulting and the population statistics of the coal quality composites per seam, Salva Mining has sub-divided Coal Resources within the BSL concession into resource classification categories based on the following spacing's (expressed as a radius of influence around points of observation which is half of the spacing between points of observation):

- Measured 500m;
- Indicated 1,000m; and
- Inferred 2,000 m radius of influence.

Spacing's for the Resource categories was based on geostatistical analysis of raw ash variation in one of the main seams in these blocks.

It is furthermore a requirement of the JORC Code (2012) that the likelihood of eventual economic extraction be considered prior to the classification of coal resources. Therefore, given the average coal quality attributes of the coal, which makes it amenable to be marketed as a thermal coal for both domestic and export power generation purposes, Salva Mining considers that it is reasonable to define all coal seams within the classification distances discussed above, to a depth of 150 m below the topographic surface, as potential open cut coal resources.

SALVA Mining Consultants

7.2 Coal Resource Statement

Coal resources have been estimated, classified and reported according to the guidelines of the JORC Code (2012) and the Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves (2014). Coal Resources are presented below in Table 7:1 to Table 7:4.

Table 7:1 BSL South Block Project - Coal Resources as at 31 December 2017

Resource Classification	Mass (Mt)	TM (adb), (%)	IM (adb) (%)	Ash (adb) (%)	Volatile Matter (adb) %	Total Sulphur (adb) %	GCV (adb) kcal/kg	Relative Density (adb)
Measured	175	35.3	19.8	5.0	38.7	0.3	5,055	1.37
Indicated	144	33.3	18.8	4.9	38.9	0.3	5,236	1.37
Inferred	74	34.9	18.1	6.8	38.5	0.4	5,112	1.40
Total	393	34.5	19.1	5.3	38.7	0.3	5,132	1.38

(*Note: Inferred Resource rounded to nearest 1 Mt*
Individual totals may differ due to rounding)

Table 7:2 Muara Lakitan Coal Resources as at 31 December 2017

Resource Classification	Mass (Mt)	TM (adb), (%)	IM (adb) (%)	Ash (adb) (%)	Volatile Matter (adb) %	Total Sulphur (adb) %	GCV (adb) kcal/kg	Relative Density (adb)
Measured	149	36.3	20.3	4.9	38.6	0.3	5,028	1.38
Indicated	78	36.2	20.2	5.4	38.3	0.3	5,023	1.39
Inferred	51	36.1	20.1	6.2	37.9	0.3	4,967	1.39
Total	278	36.2	20.2	5.3	38.4	0.3	5,015	1.38

(Note: Inferred Resource rounded to nearest 1 Mt
Individual totals may differ due to rounding)

Table 7:3 Belani Coal Resources as at 31 December 2017

Resource Classification	Mass (Mt)	TM (adb), (%)	IM (adb) (%)	Ash (adb) (%)	Volatile Matter (adb) %	Total Sulphur (adb) %	GCV (adb) kcal/kg	Relative Density (adb)
Measured	19	27.8	18.6	5.6	38.3	0.3	4,977	1.32
Indicated	46	28.3	20.2	3.8	38.1	0.1	5,295	1.33
Inferred	8	28.4	19.3	6.8	37.8	0.7	5,131	1.37
Total	73	28.2	19.7	4.6	38.1	0.2	5,194	1.33

(Note: Inferred Resource rounded to nearest 1 Mt
Individual totals may differ due to rounding)

Table 7:4 Batukucing Coal Resources as at 31 December 2017

Resource Classification	Mass (Mt)	TM (adb), (%)	IM (adb) (%)	Ash (adb) (%)	Volatile Matter (adb) %	Total Sulphur (adb) %	GCV (adb) kcal/kg	Relative Density (adb)
Measured	7	33.2	11.3	5.5	42.2	0.5	5,840	1.37
Indicated	20	33.4	9.8	5.4	43.3	0.5	5,934	1.41
Inferred	15	34.3	10.8	8.7	40.8	0.8	5,594	1.43
Total	42	33.7	10.4	6.6	42.2	0.6	5,797	1.40

(*Note: Inferred Resource rounded to nearest 1 Mt*
Individual totals may differ due to rounding)

Coal Resources subdivided on a sub-seam basis (compound seams have been modelled as individual elements or sub-seams) are presented below in Table 7:5 to Table 7:7.

Table 7:5 ML Coal Resources (Seam by Seam) as at 31 December 2017

Seam	Resource (Mt)			
	Measured	Indicated	Inferred	Total
350	4.6	4.5	3.9	13
360	9.5	6.0	0.6	16
450	4.3	3.1	2.1	10
550	6.9	4.6	2.4	14
560	1.8	1.5	0.7	4
650	4.7	2.7	0.5	8
660	1.1	0.6	0.7	2
750	1.3	2.8	1.4	5
830	0.2	0.2	2.7	3
840	4.0	1.6	0.7	6
850	6.3	2.3	1.3	10
860	4.1	1.6	3.0	9
870	17.8	12.2	9.8	40
940	4.2	1.9	2.5	9
950	43.0	19.3	9.7	72
960	6.8	2.6	1.2	11
970	15.7	5.2	4.8	26
1050	12.5	5.8	3.5	22
Total	149	78	51	278

(Note: Inferred Resource rounded to nearest 1 Mt
Individual totals may differ due to rounding)

Table 7:6 Belani Coal Resources (Seam by Seam) as at 31 December 2017

Seam	Resource (Mt)			
	Measured	Indicated	Inferred	Total
E420	1.1	3.3	1.0	6
E410	-	0.2	0.0	0
E600	0.0	0.0	0.0	0
E720	2.0	0.2	0.0	2
E710	0.4	0.0	0.0	0
E820	1.1	0.4	2.0	3
E810	1.9	0.5	3.0	5
E920	1.2	7.0	0.0	9
E910	11.2	34.9	2.0	48
Total	19	46	8	73

(Note: Inferred Resource rounded to nearest 1 Mt
Individual totals may differ due to rounding)

SALVA Mining Consultants

Table 7:7 Batukucing Coal Resources (Seam by Seam) as at 31 December 2017

Seam	Resource (Mt)			
	Measured	Indicated	Inferred	Total
B420			9.0	9
B500	0.8	2.3	1.0	4
B600	2.4	4.6	2.0	10
B700	2.5	5.7	2.0	10
B820	0.3	0.6	0.0	1
B810	0.9	1.8	0.0	3
B920		1.1	0.0	1
B910		3.9	1.0	4
Total	7	20	15	42

Note: Inferred Resource rounded to nearest 1 Mt
Individual totals may differ due to rounding)

7.3 Comparison with Previous Estimates

All the three coal sub-blocks have been modelled previously. Minarco completed the initial Coal Resources Estimate in 2008. These were subsequently revised by HDR in 2013 and Salva Mining in April 2017 and December 2017. Table 7:8 compares the Coal Resource with previous estimates.

Table 7:8 Coal Resource - Comparison with Previous Estimate

	Resource Category (Mt)			
Resource Category	Salva Mining Dec 2017	Salva Mining Apr 2017	HDR 2013	Minarco 2008
Measured	175	175	174	72
Indicated	144	144	145	178
Inferred	74	74	74	132
Total	**393**	**393**	**393**	**382**

The total estimated resource tonnes for the BSL Project in the current report is similar to the one completed by Salva Mining in April 2017, HDR in 2013 and Minarco in 2008. However, the amount of Measured plus Indicated Resource increased between 2008 and 2013 reports principally as the result of the additional infill drill hole data, most notably a significant increase in the amount of coal quality sampling data which allowed resources to be estimated for seams which previously had no resources declared due to a lack of coal quality sampling.

SALVA Mining Consultants

8 Reserve Estimate

8.1 Estimation Methodology

Salva Mining prepared the Coal Resource estimate for the BSL South Block deposit which was used as a basis for the Coal Reserve estimate. The Competent Person responsible for the Coal Resource estimate is Dr. Ross Halatchev. Coal Reserves quoted in this report are inclusive of Coal Resources.

The Coal reserves was prepared in this report are based on the outcome of pit optimisation results and the Techno-economics study carried out by Salva Mining based at the current long term coal prices and the existing contract costs and validated against the previous feasibility studies and actual mining operations data.

The Competent Person for Reserves considers the proposed mine plan and mining schedule is techno-economically viable and achievable. This has been done by reviewing all the modifying factors; estimating reserves in the pit shell and doing a strategic production schedule and economic model which confirms a positive cash margin using the cost and revenue factors as described below in this report.

8.2 Modifying Factors

The following table outlines the factors used to run the mine optimisation and estimate the Reserve Tonnage.

Table 8:1 Modifying & Mine Optimisation Factors

Factor	Chosen Criteria
Seam roof & floor coal loss of 0.025 m each	0.05m
Seam roof & floor dilution 0.025 m each	0.05m
Geological & Mining loss including loss in transportation and handling at port	2%
Minimum mining thickness minable coal seam	0.3m
Dilution default density	2.2bcm/t
Dilution default calorific value	500Kcal/kg
Dilution default ash	75%
Overall Highwall and Endwall slope	35º
Maximum Pit depth	150m (for Belani COSR 10:1)
Minimum Mining width at Pit bottom	25m
Mining, Coal handling and Transport Cost	Available & Used
Coal Selling Price for Break-even Stripping Ratio calculation	Muara Lakitan-US$ 34.3/tonne Batukucing - US$ 37.6/tonne Belani - US$ 39.6/tonne
Government Documents / approvals Supplied by Client	√
Environment Report supplied by client	√
Geotechnical Report supplied by client	√
Hydrogeology Report supplied by client	√

SALVA
Mining Consultants

8.3 Notes on Modifying Factors

8.3.1 Mining Factors

General

The mining limits are determined by considering physical limitations, mining parameters, economic factors and general modifying factors as above (See Table 8:1 above)

The mining factors applied to the Coal Resource model for deriving mining quantities were selected based on the use of suitably sized excavators and trucks. The assumptions are that due to the moderate to steep dip (15 -20 degree) of the coal, mining will need to occur in benches.

Cut-off Parameters and Pit Limit

Coal Resources are reported to a maximum depth of 150m for ML & BK block and for BL block, it is reported at cut off stripping ratio of 10:1 (waste: coal).

Overall low-wall slopes as per the basal seam dip, end-wall slopes and high-wall slope of 35 degrees were assumed. The mining factors (such as recovery and dilution) were defined based on the proposed open cut mining method and the coal seam characteristics (see Table 8:1). The exclusion criteria included the lease boundary and a minimum working section thickness. Through the application of mining factors, the coal resource model was converted to a ROM coal model. The Industry standard Minex Optimiser software was used based on optimisation factors (see table 8:1) to generate a series of incremental pit shells on the long-term coal selling price at different discount rates. This is a three-dimensional approach which generates a series of pit shells where each increment reflects different economic scenarios such as changes to depth, mining cost or coal price. It uses Lerch-Grossman algorithm which reviews the economic viability of the blocks.

An economic model was prepared for the mining operation to determine the project breakeven or incremental stripping ratio. The pit optimisation results were examined and pit shells selected where the incremental stripping ratios were equal to break even strip ratio determined at a point where the costs for mining and handling the coal equalled the revenue generated by the coal.

Muara Lakitan deposit

The coal seam distribution within the Muara Lakitan deposit resulted in the Optimiser identifying two main pits where the main bottom seam is 970. Seams 800 group and 900 groups are well developed in both the northern and southern pits. The pits were subject to adjustments to form a practical pit design, which lead to the exclusion of the minor narrow pit shells and the resultant formation of two separate pit shells (Mineable Pit Shells), which formed the basis of the subsequent reserves estimate.

The coal quantities within the Mineable Pit Shells through the application of mining factors converted to a total of 158.9 Mt of ROM coal.

Batukucing deposit

The coal seam distribution within the Batukucing deposit resulted in the Optimiser identifying the main pit where the main basal seam is B910 well developed in the pit. The pit was subjected to adjustments to form a practical pit design, which led to the exclusion of the minor narrow pit shells

and the resultant formation of the main pit shell, (Mineable Pit Shell), which formed the basis of the subsequent reserves estimate.

The coal quantities within the Mineable Pit Shell through the application of mining factors converted to a total of 18.9 Mt of ROM coal.

Belani deposit

The coal seam distribution within the Belani deposit resulted in the Optimiser identifying the main pit where the main basal seam is E910 well developed in the pit. The pit was subjected to adjustments to form a practical pit design, which led to the exclusion of the minor narrow pit shells and the resultant formation of the main pit shell, (Mineable Pit Shell), which formed the basis of the subsequent reserves estimate.

The coal quantities within the Mineable Pit Shell through the application of mining factors converted to a total of 53.8 Mt of ROM coal.

8.3.2 Geo-technical Factors

The high wall batters (slope of advancing Highwall) adopted were those recommended by the Geotechnical Investigation for Muara Lakitan deposit in 2009. The main objective of this study was to assess the stability of the highwalls at 35 degrees. The key findings of the study reasonably agree with the geo-technical test work done to conclude the consideration of the adequate factor of safety (FOS) for highwalls at overall slope of 35 degrees. Further, six number of Geo-technical boreholes has been drilled in the block to establish the geo-technical properties.

The current geo-technical study rules out the option of conventional strike advance strip mining with up-dip spoil dumping due to instability risk issues due to weak ground and adverse geological setting associated with in-pit spoil dumping due to the relatively higher strata dips. It advises for further mine planning/option studies to give due consideration of in-pit dump stability risks which can be resolved and managed through either ex-pit dumping or use of suitable mining methods.

8.3.3 Hydrogeological Factors

Client provided the report "Preliminary study on groundwater assessment for Muara Lakitan coal project" which was carried out by Australasian Groundwater and Environmental Consultants Pty Ltd (AGE) in 2009.

This report addresses the groundwater regime of the site and provides an assessment of potential groundwater inflow to the pits for various stages of pit development. It has advised to come out with the most likely mining method in the scenario of current groundwater flow (hydraulic gradient) which is north to the south of the deposit. The volume of water that will need to be disposed will depend on the length of the highwall exposed at any one time and the length of the base of the pit that needs to remain dry to maintain traffic-ability.

8.3.4 Processing Factors

The coal is to be sold unwashed so no processing factors have been applied.

SALVA Mining Consultants

8.3.5 Mine Logistics Factors

The company has previously engaged specialist logistics consultants, Royal Haskoning DHV in 2013 to review and prepare detailed logistics options studies for transporting coal from Muara Lakitan, Batukucing and Belani deposits by river (barges). Further work to assess road haulage was assessed in 2016.

Two viable logistic routes were identified:

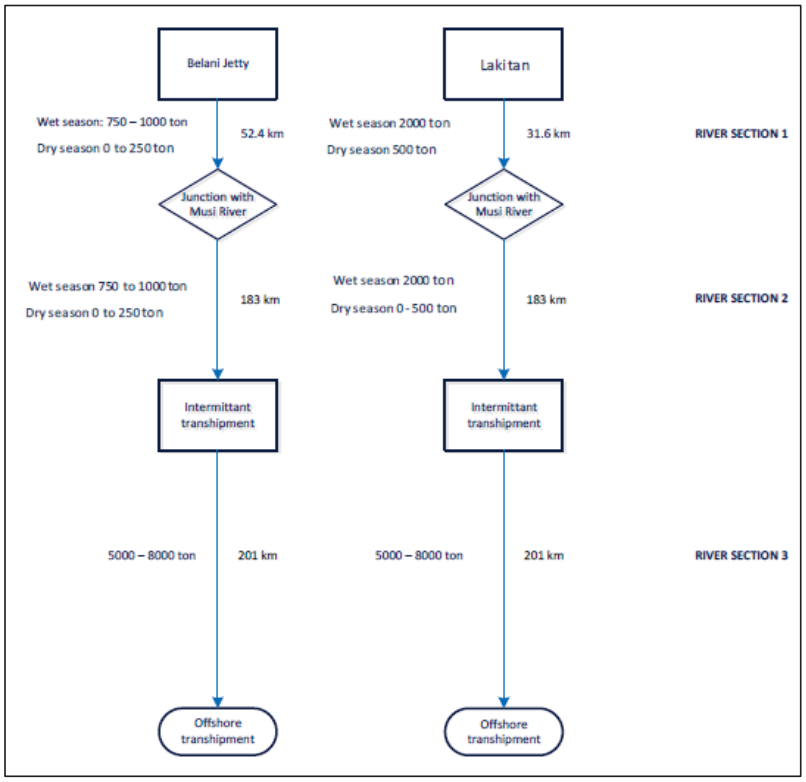
- Southern Barging Route; and
- Northern Road and Barge Route.

The brief summary for both the options of coal transport study has been discussed below.

Southern Connection – Coal transport by River

In this option, it is planned that the coal from predominately Muara Lakitan (ML) Pit along with some coal output from Batukucing Pit will be transported on the Musi River (Figure 8:1).

Figure 8:1 Overview - Coal Transport by River

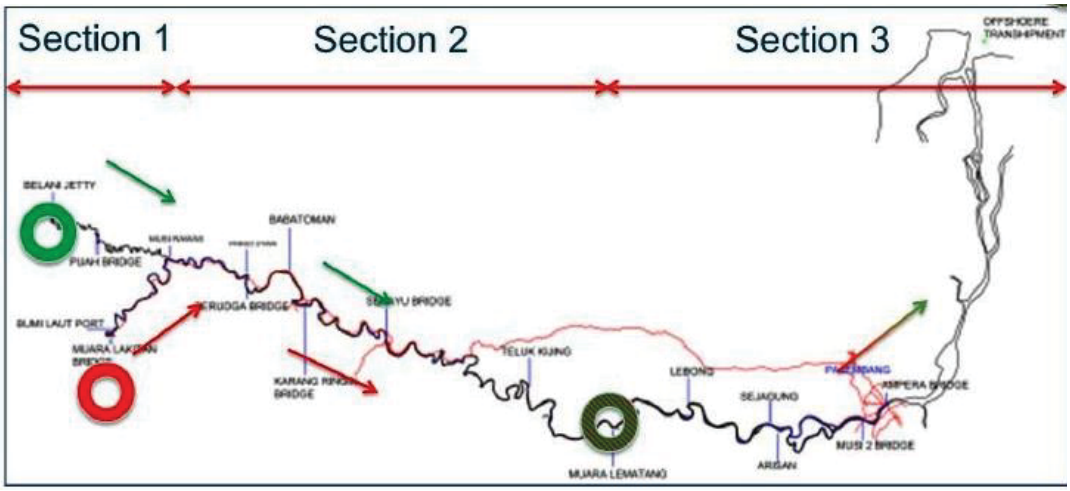


(Source: Royal Haskoning DHV, 2013)

Coal from the Muara Lakitan Jetty (ML Jetty) is planned to be barged through Musi River by barges up to 2000t capacity to the intermittent stockpile at Muara Lematang located downstream on the Musi River. A barge loading terminal is currently under construction at Muara Lakitan, including a 700tph barge loading conveyor.

Coal from the Batukucing Pit (and potentially Belani Pit) will be barged on the Rawas River via the confluence with Musi River to the intermittent stockpile at Muara Lematang located along the Musi River (Figure 8:2).

Figure 8:2 Coal Transport by River



(Source: Royal Haskoning DHV, 2013)

The water level of the Musi River downstream of Muara Lematang does not vary much over the seasons, due to the relative proximity of the sea and the influence of tides; this results in river depths being much larger throughout the year.

A key issue is the size of barges suited to the upper reaches of the Musi River, including the impact of seasonal conditions on barge traffic-ability. The capacity of barges up-to the intermittent stockpile at Muara Lematang will be dependent upon draft of the river due to seasonal flow of the river in the upper reaches. Depending on the draft, it is anticipated that barges of 1,000t to 2,000t will be able to work on the upper segment to the intermediate port at Maura Lamatang.

Coal from the intermittent stockpile at Muara Lamatang will be transported by the larger barges of 7500 t to the offshore trans-shipment port at the mouth of the Musi River (see section 3 of Fig 8:10) if required, however PT BSL is planning to sell the coal at the river port for domestic power plant usage.

Coal transport through barges has also considered the existing limitations (bridges over Musi River) for its capacity assessment (Fig 8:11).

SALVA
Mining Consultants

Figure 8:3 Location of Ports and Bridges on Musi River

(Source: Royal Haskoning DHV, 2013)

The maximum volume of coal that can be transported on the Musi and Rawas River is mainly governed by the navigation constraints on the upper sections of the rivers and the loading capacity of barge loading terminals. The upper section of the Musi and Rawas River are subject to the lowest drafts during the dry season. The river is also narrower in the upstream part and bends are much sharper due to higher current velocities. The capacity assessment is therefore made upon;

The river logistic study determined that the Maximum barging capacity is governed on both upstream sections of the narrow bends, sharp bends and narrow sections, which limits the export capacity of both mines to about 3 million m3 which is approximately 4.2 Mt assuming density of 1.4 t/m3.

For the purpose of this Report Salva Mining has opted to be conservative and assumed maximum capacity of 4 Mtpa only.

Northern Connection – Coal transport by Road

In another option, it is proposed to transport coal from Belani and Batukucing pits by road to the Gorby Port which is located north east of PT BSL concession.

There will be total coal transport of ~130km from the Belani pit and ~170km from Muara Lakitan pits by road to the Gorby Port. Table 8:2 exhibits the various road sections and the distances. There are some local roads (govt/village roads) available along with dedicated private haulage road from the pits to the Gorby Port which needs to be upgraded to carry proposed peak production capacity.

Coal from Gorby port will be further transported by the 7,500t barges to the offshore trans-shipment port for coal export for a distance of ~120 km if required for export purpose, however PT BSL is planning to sell coal at river port for domestic power plant use.

SALVA Mining Consultants

Table 8:2 Road Logistics

Section		Distance (km)	Road Track	Upgrade Reqd.
From	To			
Belani	Gorby road	9.8	No	Yes
Muara Lakitan	Gorby Road	53.5	Existing	Yes
Gorby Road	Government Road Junction	13.0	Existing	No
Government Road Junction	Macang Sakti Junction	7.6	Existing	No
Macang Sakti Junction	PT Bumi Persada Road	36.5	Existing	No
PT Bumi Persada Road	Pulia Gading Village	55.0	Existing	No
Pulia Gading Village	Gorby Port	6.1	Existing	Yes
Distance (km)		128 -171		

The existing and proposed road network to the Gorby Port from Belani pit is presented in Fig 8:12 and from Muara Lakitan pit in Fig 8:13.

Summary of Logistics Options

BSL has proposed to use both Northern Connection (road to Gorby Port) and Southern Connection (small barge to Muara Lematang). Projected tonnage is shown in Table 8:3.

SALVA Mining Consultants

Table 8:3 Logistics – Tonnage (Mt) over Life of Mine

tem	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Road - BL	1.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-	-	-	-	-	-	-
Road - BK	-	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-	-	-
Road - ML	-	-	-	-	-	-	-	-	-	-	2.0	2.0	2.0	6.0	6.0	6.0	6.0	6.0	2.0	1.2
Total - Road	**1.0**	**2.0**	**3.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**2.0**	**1.2**
Barge - ML	-	-	1.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.0
Total - Barge	**0.0**	**0.0**	**1.0**	**2.0**	**2.0**	**2.0**	**2.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**2.0**

SALVA
Mining Consultants

Figure 8:4 Coal Transport by Road from Belani Pit to Gorby Port

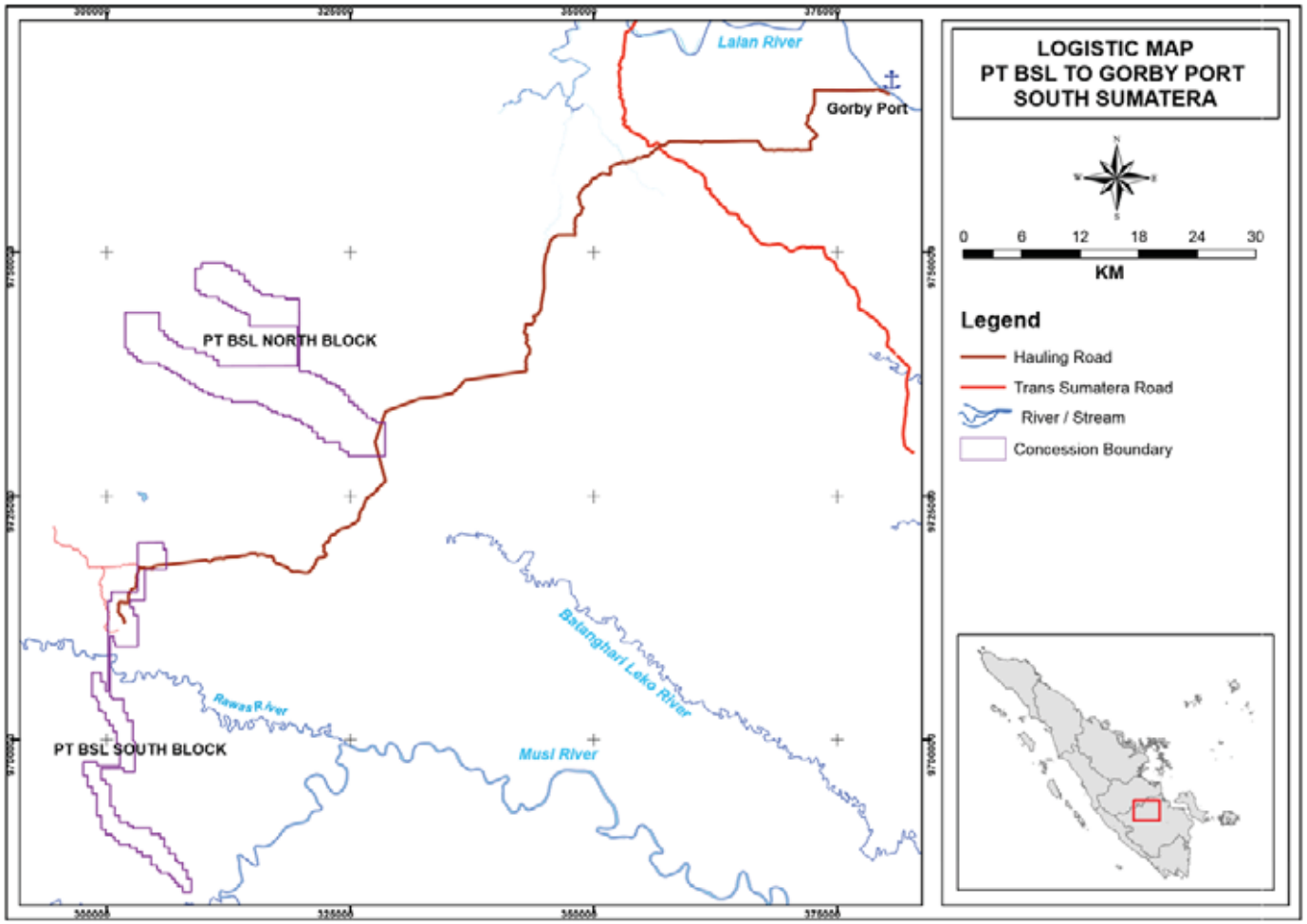
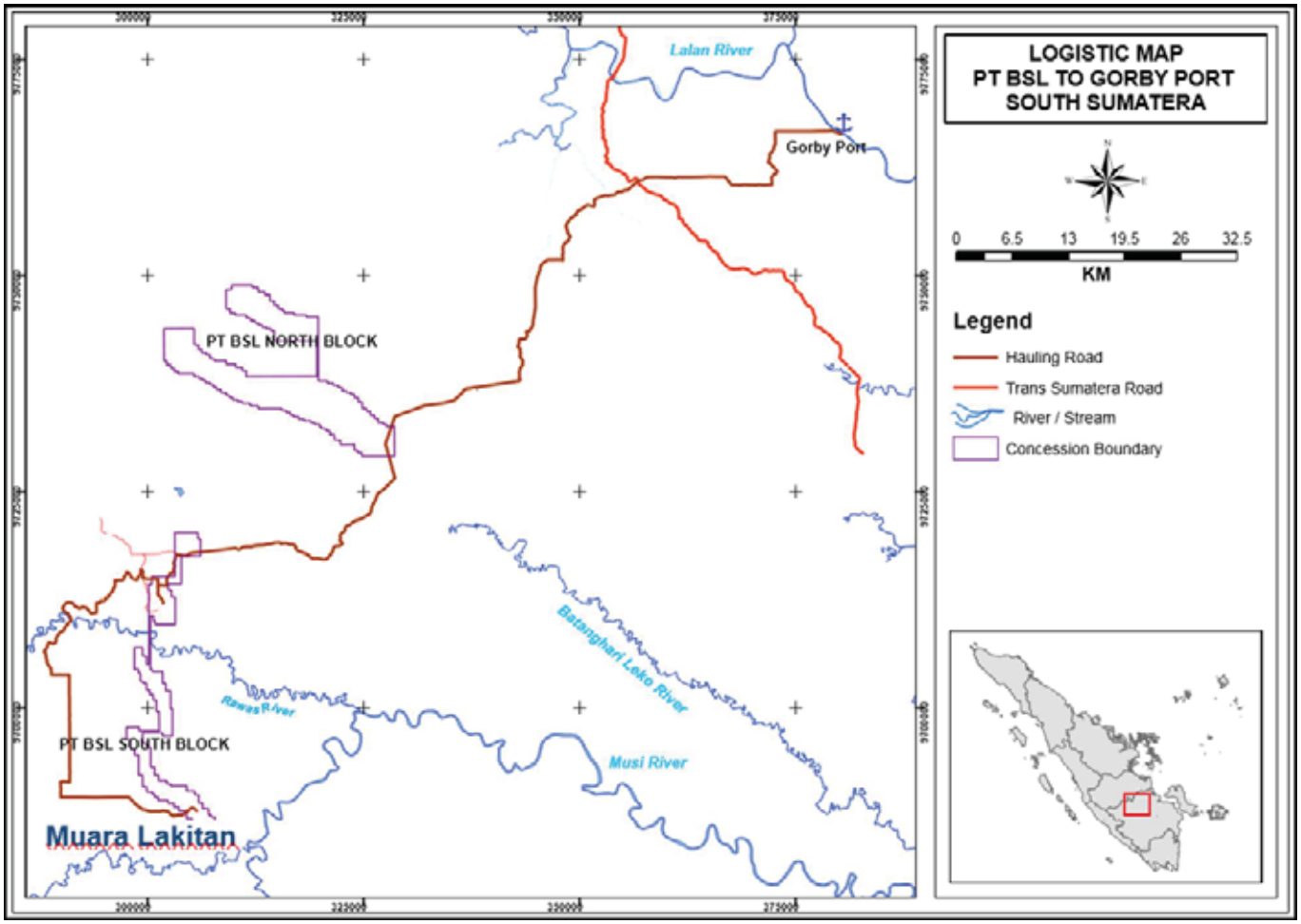


Figure 8:5 Coal Transport by Road from Muara Lakitan to Gorby Port



SALVA Mining Consultants

8.3.6 Permits and Approvals

From discussions with GEARS, Salva Mining understands that most permits and approvals with regard to further activities in Muara Lakitan, Batukucing and Belani coal deposit have been obtained.

8.3.7 Cost and Revenue Factors

The client provided a "data sheet" of indicative unit costs and revenues relevant for this project which was subject to review. Salva Mining did an independent coal marketing study to review the coal prices forecast for reasonableness. Salva Mining also reviewed the costs for reasonableness against known current mining costs for similar mining conditions within Indonesia. An in-house NPV based economic model was developed to show that the project and reserves are "economic". These unit rates were then used to estimate the cost to deliver coal to a ship (FOB vessel). This allowed a break-even strip ratio to be estimated and the rates were also used to calibrate the Optimiser software. The following points summarise the cost and revenue factors used for the estimate (All costs are in US dollars).

- Long term coal price of US$ 34.3 to US$39.6 per tonne (depending on coal quality)
- Royalties of 13.5% of revenue less marketing, barge and port costs have been allowed.
- Allowances were made for hauling, crushing, stockpiling, barge loading, barging and ship loading and royalty.
- Coal mining rate considered is US$ 0.75 per tonne provided by the client.
- Waste mining rate considered is US$ 1.70 per bank cubic metre provided by the client.

Capital Cost

As the client is planning to engage local mining contractors, it is envisaged that no major capital expenditure shall be incurred at the mine site. Majority of the capital is associated with land acquisition and road upgrade. Table 8:4 shows the capital breakdown of US$ 29.05 M.

Table 8:4 Estimation of Capital Cost

Sr. No.	Particulars	Direct Cost ($M)	Contingency ($M)	Total Cost ($M)
1.1	Land Compensation	6.96	1.04	8.00
1	Land Compensation	6.96	1.04	8.00
2.1	Workshop, Office and Laboratory	1.10	0.17	1.27
2.2	Backup Power Generation	0.40	0.06	0.46
2.3	Coal Handling Equipment	1.00	0.15	1.15
2.4	Accommodation Camp	1.00	0.15	1.15
2.5	Fuel Storage	0.80	0.12	0.92
2.6	Water Supply and Sewage System	0.50	0.08	0.58
2.7	Communications	0.50	0.08	0.58
2	Mine Infrastructure	5.30	0.80	6.10
3.1	Road Upgrade Mine to Port	8.00	1.20	9.20
3.2	Port Stockpile and Jetty	5.00	0.75	5.75
3	Road & Port Facilities	13.00	1.95	14.95
0	**Total Project Cost**	**25.26**	**3.79**	**29.05**

SALVA Mining Consultants

Operating Cost

Salva Mining prepared the operating costs for mining and other activities including coal hauling, barging and port handling charges, which was checked and validated against actual operating cost. Salva Mining has further benchmarked the cost against other operations for reasonableness.

Break Even Stripping Ratio

Table 8:5 summarises the calculation of the Break Even Stripping Ratio. The methodology adopted involves taking the cost to mine a tonne of coal and adding all the costs associated with getting the coal to the point of sale.

Table 8:5 Estimation of Break-even Stripping Ratio

Estimation of Break-even Strip Ratio for BSL Blocks	ML	BK	BL
Coal Price, US$/t	$34.30	$37.60	$39.60
Total of Haul, Barging, Port & Royalty, US$/t	$15.97	$16.94	$15.66
Price at Mine Head, US$/t	$18.33	$20.66	$23.94
Other mine related cost, US$/t	$4.15	$4.03	$4.24
Price ex mine, US$/t	$14.18	$16.63	$19.70
Cost of mining (Coal), US$/t	$0.75	$0.75	$0.75
Cost of Mining (Waste), US$/bcm	$1.70	$1.70	$1.70
Break-even stripping ratio, bcm/t	7.90	9.34	11.15

8.3.8 Marketing and Product Specifications

To estimate the long-term price for different types of project coals, Salva Mining has adopted the latest Consensus brokers forecast (December 2017) for thermal coal prices ex Australia (USD/t, FOB) as a benchmark price. These data which was collected by Consensus Economics included forecasts of future prices for coal of CV 6,322 kcal/kg (gar) over a 10-year horizon from each expert. Salva Mining has adopted average of this forecast prices as a reasonable benchmark price. Utilising the historical price differential for this type of Indonesian coal over benchmark price, Salva Mining has discounted long term benchmark price to accommodate low rank sub bituminous (higher moisture) coal based on the historical discount. The following Table 8:6 summarises long term price forecast taken to estimate reserves.

Table 8:6 Long Term Price Estimate

Year	GCV, kcal/kg (gar)	Long term Price at Point of Sale (US $/t)
Muara Lakitan	3,977	34.30
Batukucing	4,369	37.60
Belani	4,596	39.60

8.3.9 Other Relevant Factors

There are a number of planning issues which may impact on the stated mining reserves. These include:

- detailed geotechnical studies to confirm the overall slope angles and other parameters;
- detailed hydrogeological studies to know the water flow gradient and dewatering arrangement;
- more quality data as well as detailed drilling and updates to the geological model;
- environmental study conducted and approval (AMDAL) granted;
- land acquisition and approval from the local landowners; and
- detailed mine planning, infrastructure design, transportation, marketing and costing studies before project execution.

These issues may cause the pit shell and mining quantities to change in future JORC code compliant Reserve Statements.

8.4 Optimised Pit Shell

8.4.1 Optimised Pit Shell

The optimised pit-shells for BSL blocks as delineated in the final pit design do contain Inferred Resources which are excluded from the Coal Reserves reported for the BSL concession. Under the JORC Code, Inferred Resources cannot be converted to Reserves due to poor confidence in structural continuity and quality variables. In-situ quantities and mine scheduled tonnes within optimized pit-shell along with Reserves are shown in Table 8:7.

Table 8:7 In-situ & ROM Scheduled Quantities & Reserves, BSL Concession

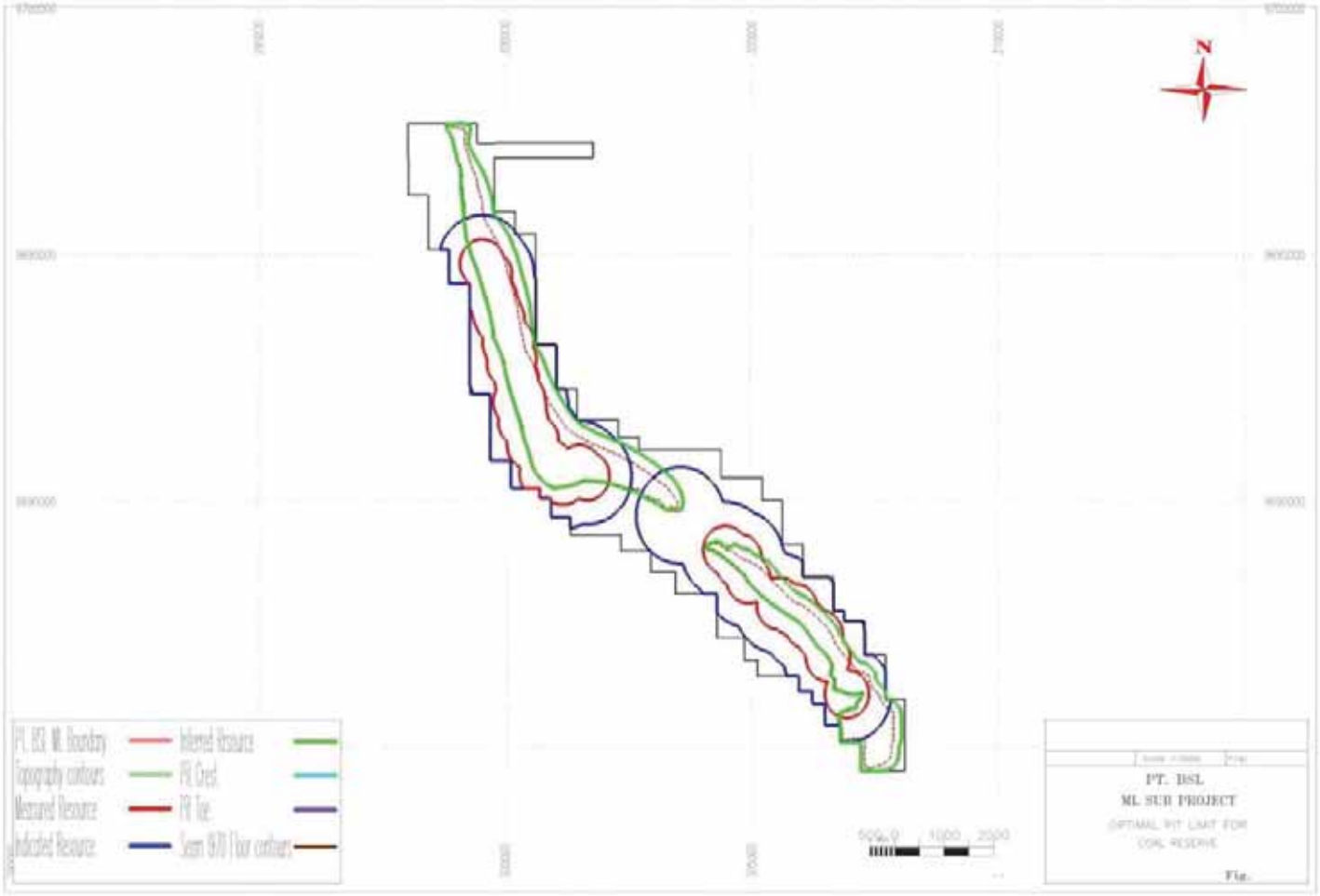
Concession	In-situ Coal (Mt)	Scheduled Coal within Optimised Pit shell (Mt)	Coal Reserves (Mt)
Muara Lakitan	161.3	158.9	141.1
Batukucing	19.5	18.9	13.1
Belani	55.5	53.8	40.4
Total, BSL	**236.3**	**231.6**	**194.6**

The ROM coal quantities within the Mineable Pit Shells were then tested so that only Measured and Indicated Coal Resources were classified as Coal Reserves. Coal Reserves within the seams having Measured Resources are reported as Proved Reserves whereas seams having Indicated Resources are reported as Probable Reserves.

The selected pit shells and associated cross sections for estimating Coal Reserves for Muara Lakitan, Batukucing and Belani coal deposit are shown on Figures 8:6 to 8:13.

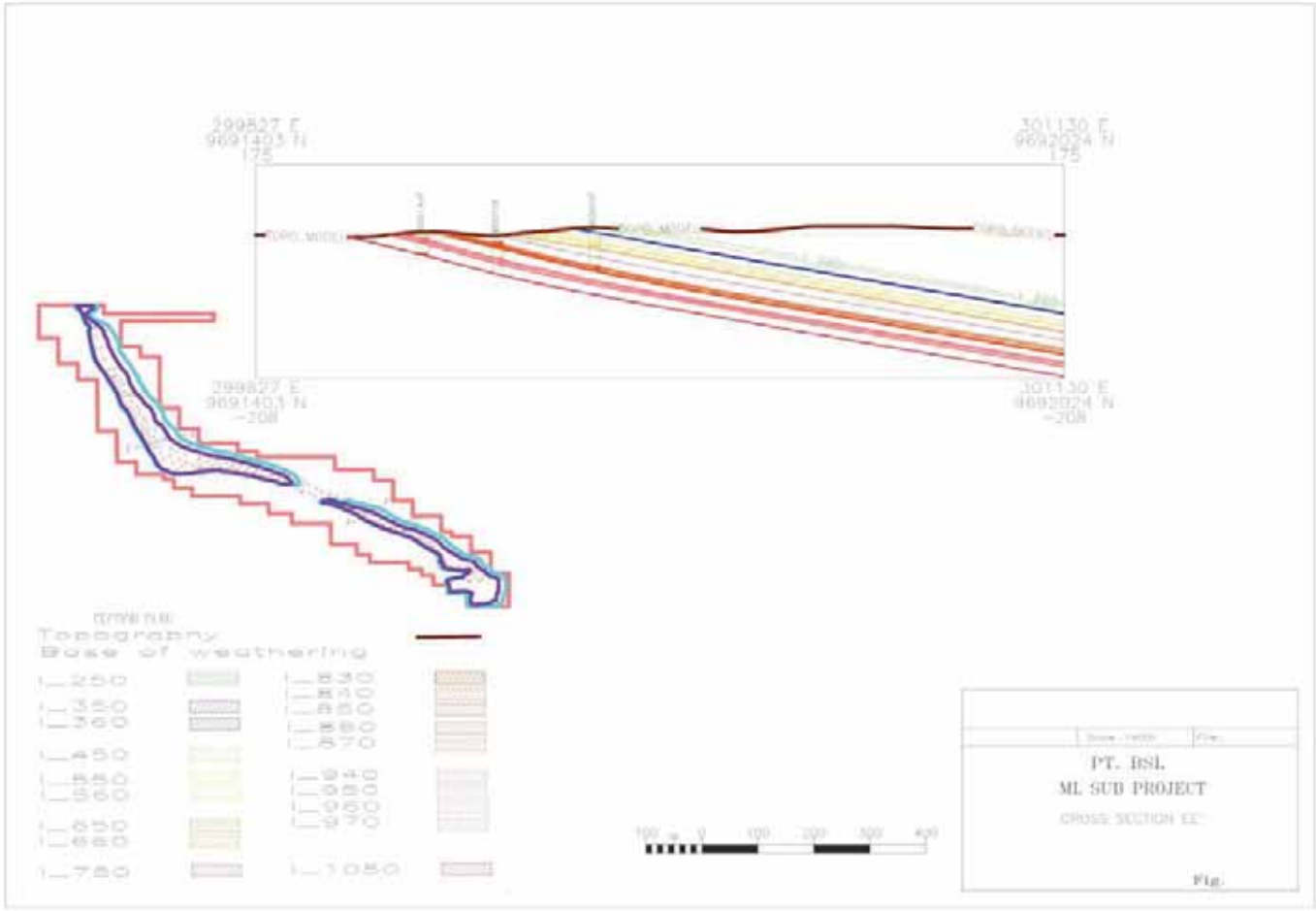
SALVA
Mining Consultants

Figure 8:6 Final Pit Design, Muara Lakitan



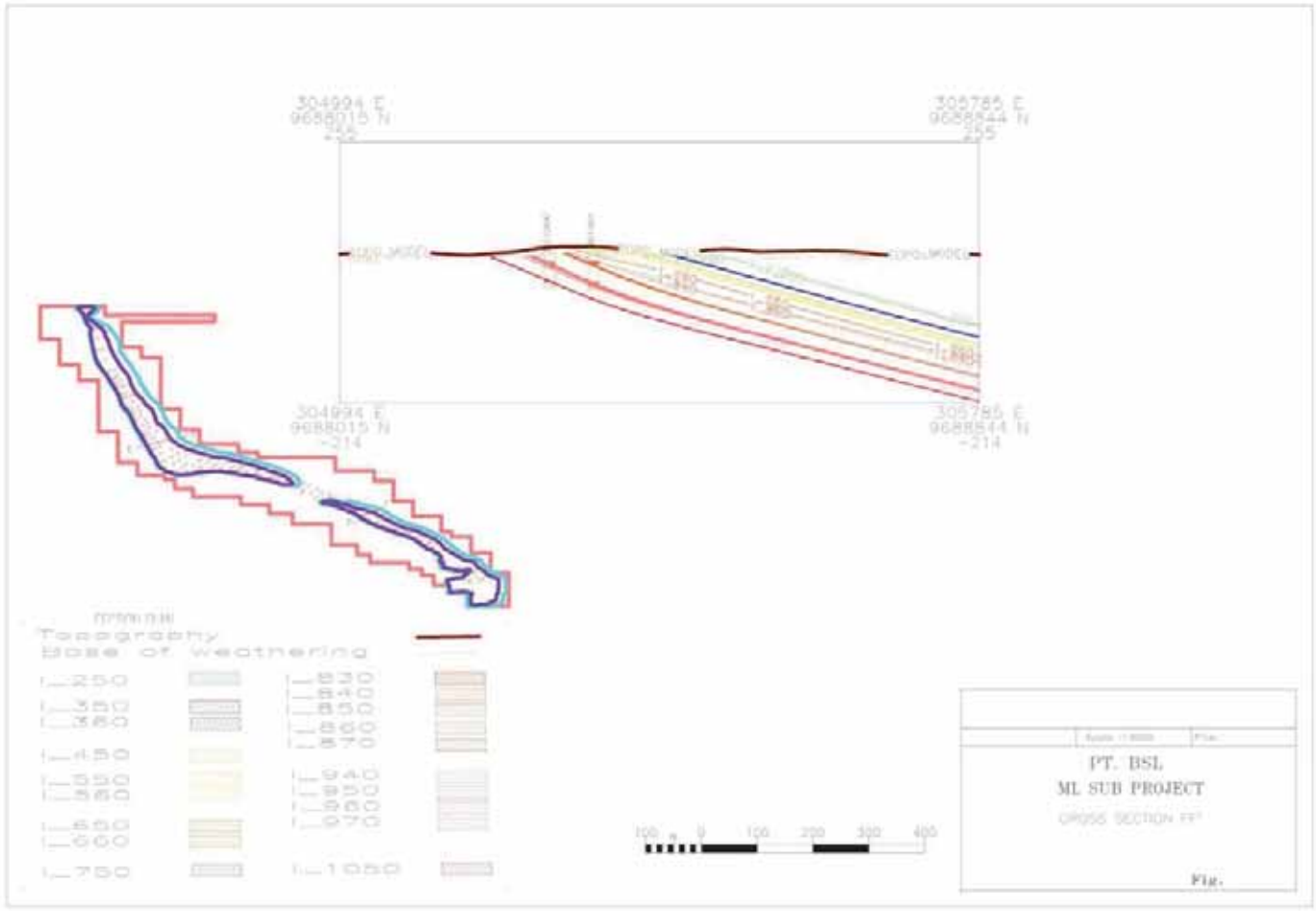
SALVA
Mining Consultants

Figure 8:7 Cross Section 'E-E', Muara Lakitan



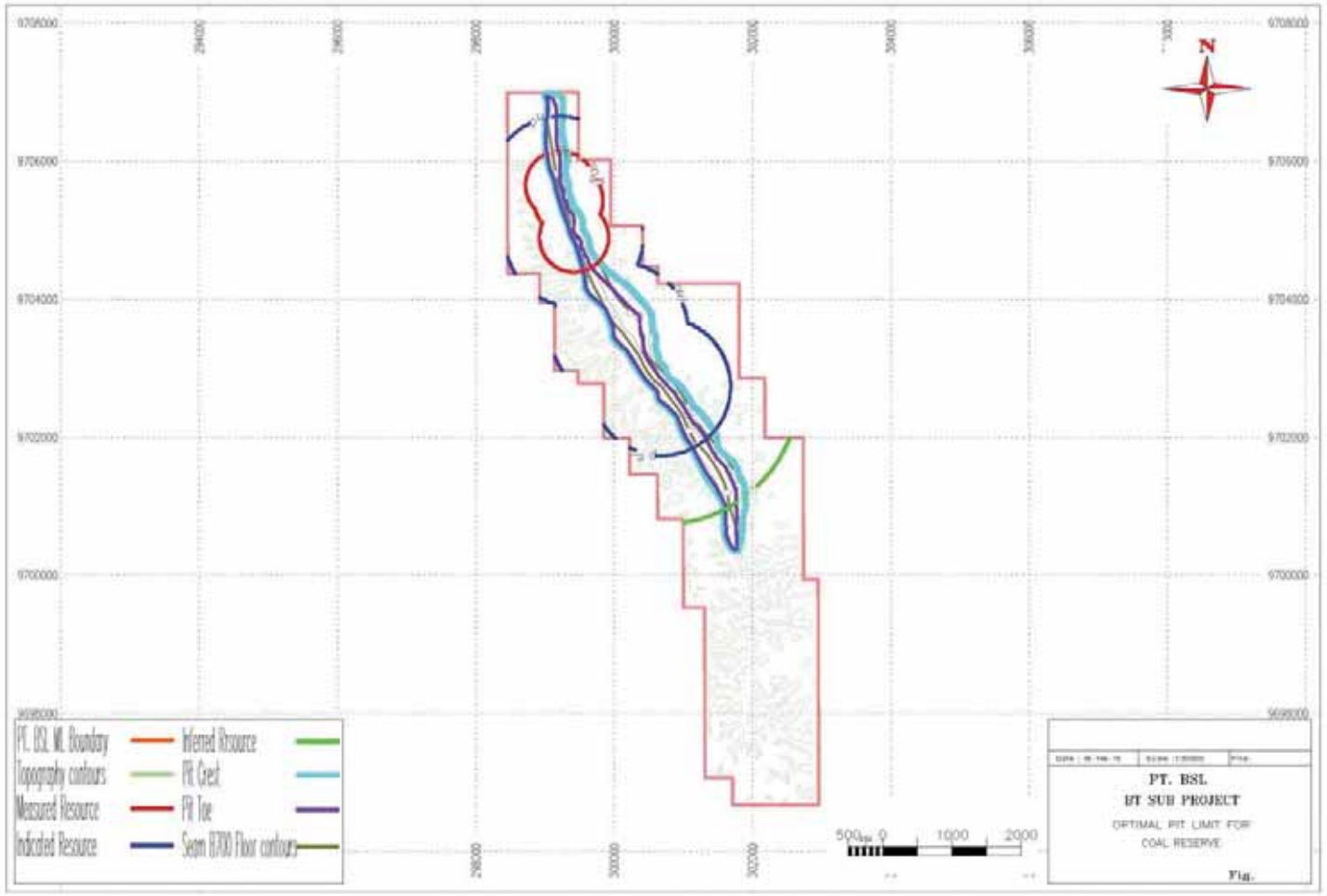
SALVA
Mining Consultants

Figure 8:8 Cross Section 'F-F', Muara Lakitan



SALVA
Mining Consultants

Figure 8:9 Final Pit Design, Batukucing



SALVA
Mining Consultants

Figure 8:10 Cross Section 'A-A', Batukucing

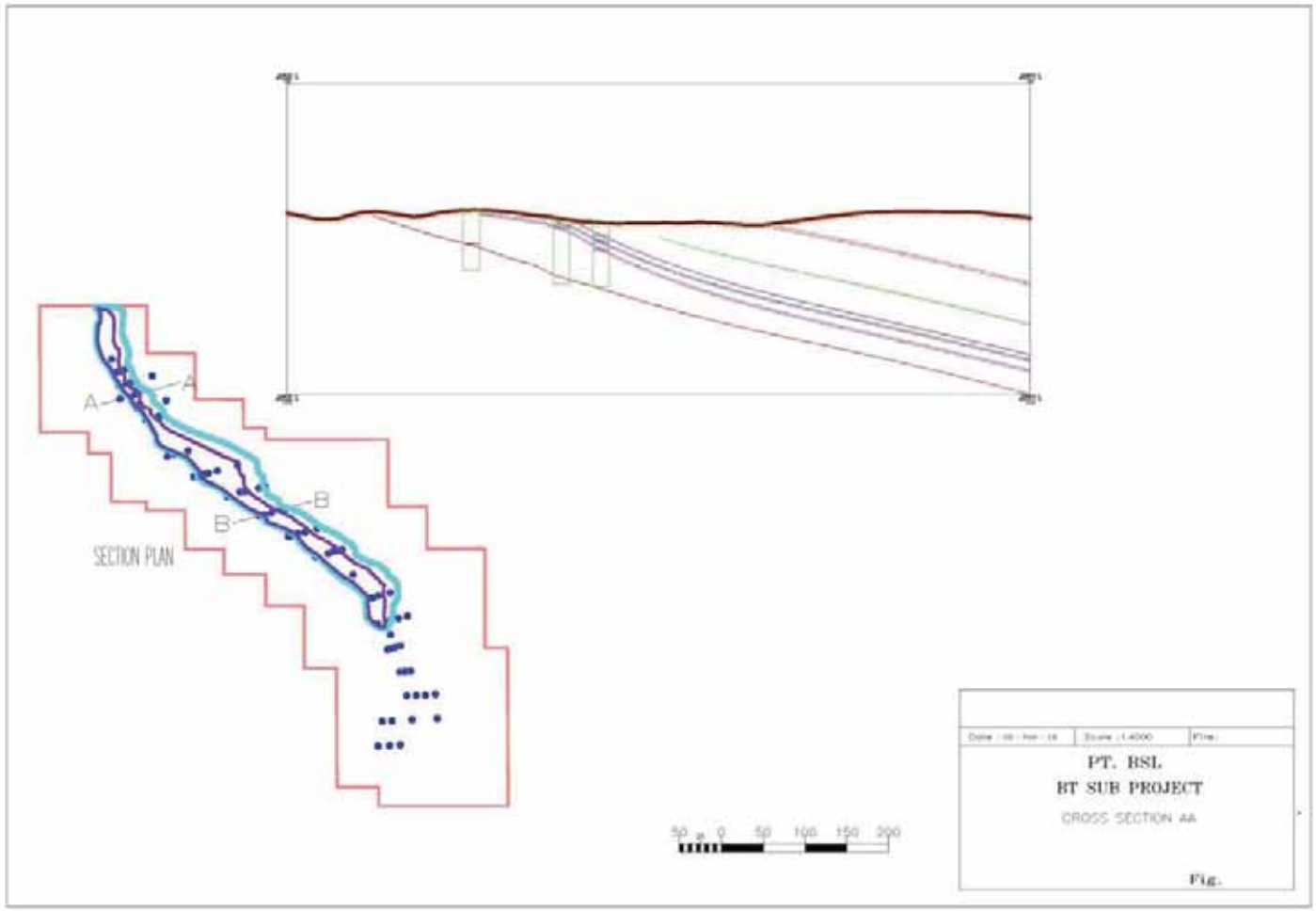
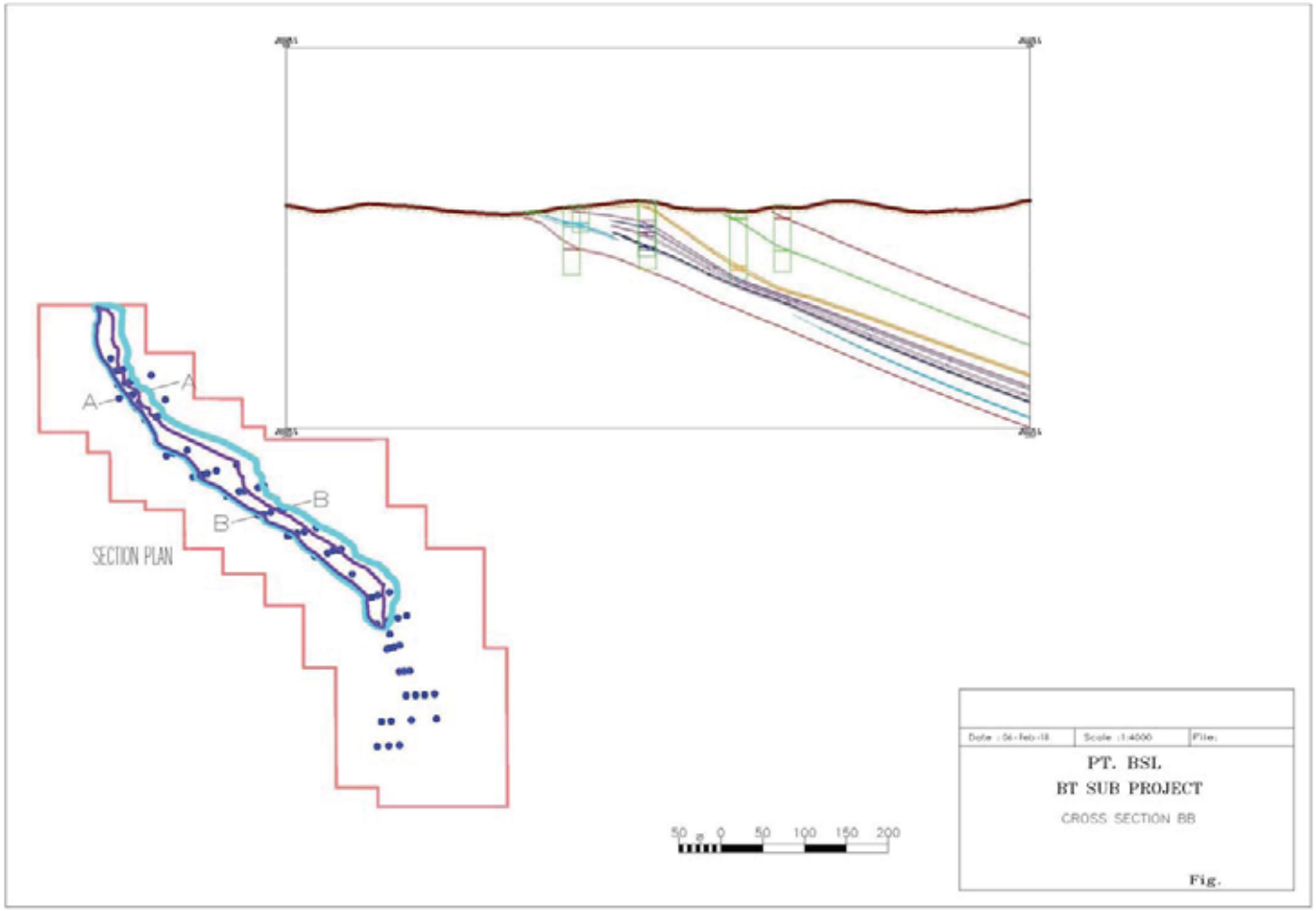
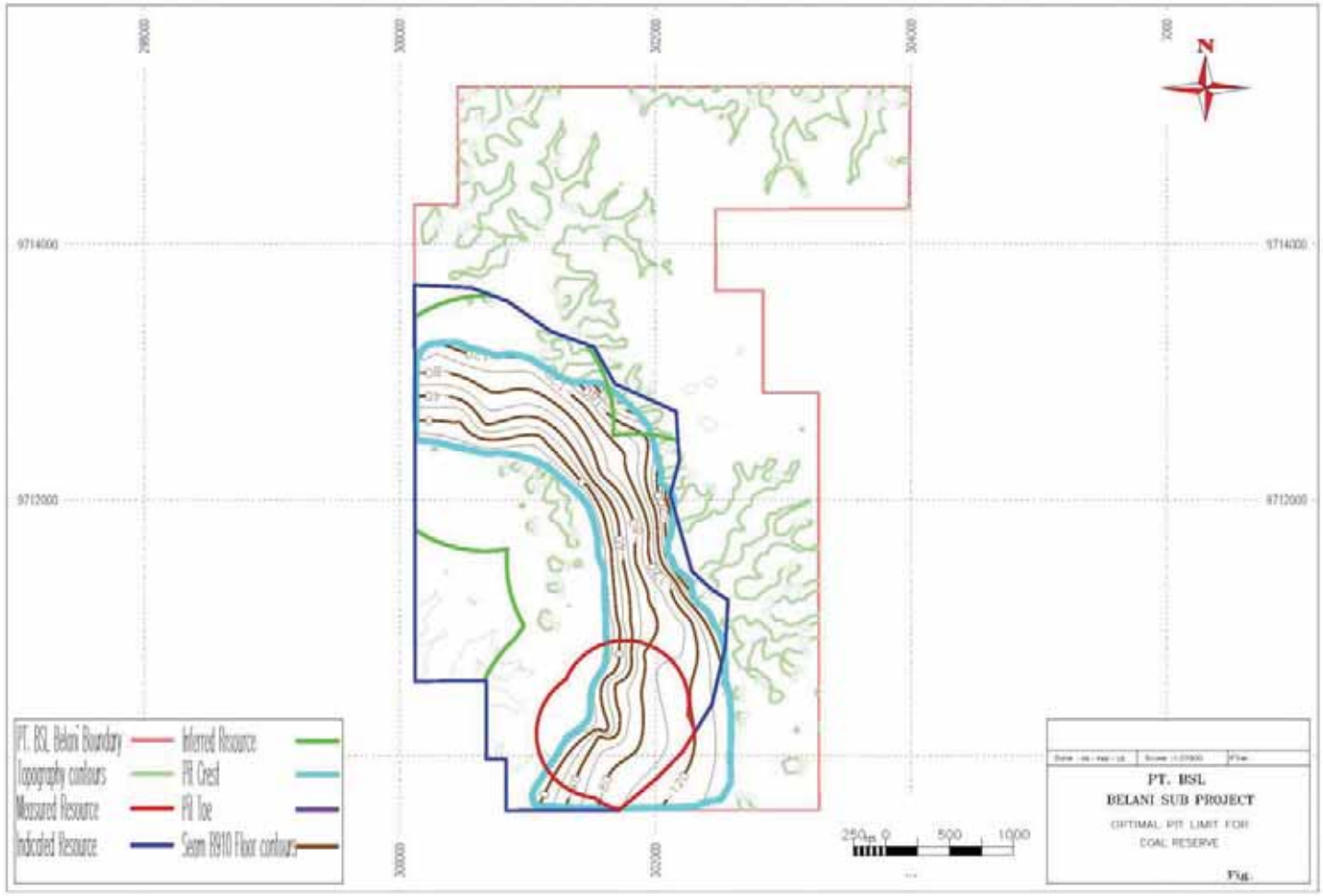


Figure 8:11 Cross Section 'B-B', Batukucing



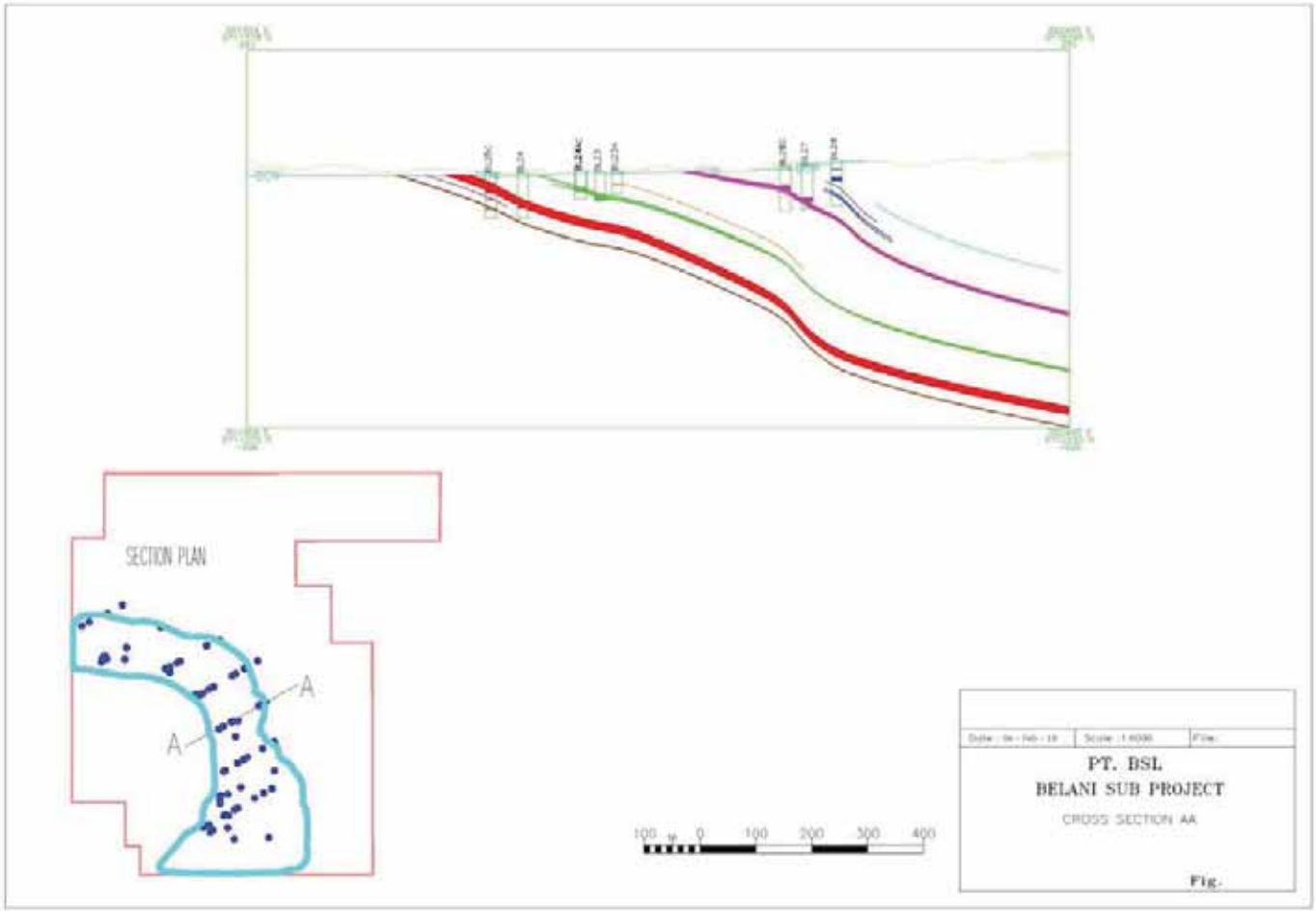
SALVA
Mining Consultants

Figure 8:12 Final Pit Design, Belani



SALVA
Mining Consultants

Figure 8:13 Cross Section A-A'', Belani



Open cut mining by mining contractors, using suitably sized truck and excavator is proposed. The mining method can be described as a "multi seam, moderate to steep dip, open cut coal mine using truck and shovel equipment in a combination of strip and haulback operations".

8.5 Audits and Reviews

Checks were done to validate the Minex Coal Resources to Coal Reserves estimation by repeating it manually in an Excel spread sheet. Other validation work included estimating the total volume of coal and waste in the pit shells using the separate industry standard computer programs Minescape. As Minescape structure and quality grids were imported into Minex for optimisation work, volume and area checks were also carried out in Minex within the pit shells.

The difference between the Proved and Probable Reserves with respect to Measured and Indicated Resources respectively is explained by the following:

- the Measured and Indicated Resource polygons extend beyond the Mineable Pit Shells;
- there are some Inferred tonnes in the pit shell which cannot be counted as Coal Reserves; and
- there are geological and mining losses and dilution gains in the coal reserve estimation.

8.6 Discussion of Relative Accuracy and Confidence

The mine is not yet producing so there is no history to check against. There is a need for more detailed mine planning, transport, marketing and costing studies before project execution.

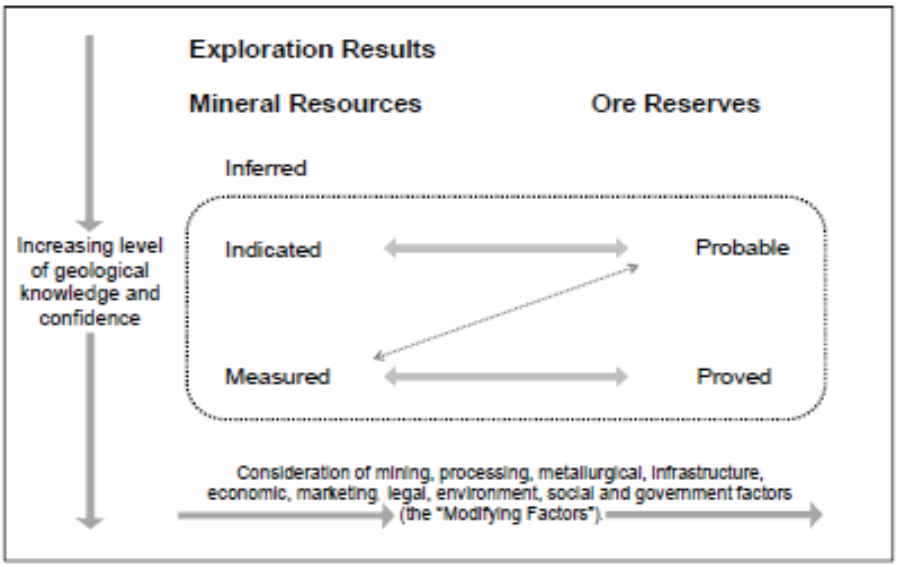
8.7 Reserves Classification

Under the JORC Code as shown below only Measured and Indicated Coal Resources can be considered for conversion to Coal Reserves after consideration of the "Modifying Factors" including mining, processing, economic, environmental, and social and government factors.

To convert Resources to Reserves it must be demonstrated that extraction could be justified after applying reasonable investment assumptions. The highest confidence level establishes Proved Reserves from Measured Resources and a lesser confidence level establishes Probable Reserves from Indicated Resources. A level of uncertainty in any one or more of the Modifying Factors may result in Measured Resources converting to Probable Reserves depending on materiality. A high level of uncertainty in any one or more of the Modifying Factors may preclude the conversion of the affected Resources to Reserves.

This classification is also consistent with the level of detail in the mine planning completed for Muara Lakitan coal deposit. Inferred Coal Resources in the mineable pit shell have been excluded from the Reserve Statement.

Figure 8:14 General relationships between Mineral Resources & Ore Reserves



Source: JORC Code 2012

8.8 Coal Reserve Statement

The Statement of Coal Reserves has been prepared in accordance with the 2012 Edition of the JORC Code. Total ROM coal Reserves for PT Bara Sentosa Lestari coal deposit ("BSL") are summarised in Table 8:8 as of 31 December 2017, Total ROM coal reserves are same as total marketable coal reserves.

Table 8:8 Coal Reserves for BSL Coal Concession as at 31 December 2017

Concession	Coal Reserve (Mt)			RD, adb t/m3	TM, arb %	IM adb %	Ash, adb %	CV, arb Kcal/kg	TS, adb %
	Proved	Probable	Total						
Muara Lakitan	109.8	31.3	141.1	1.38	36.8	20.9	5.0	3,977	0.30
Batukucing	1.7	11.5	13.1	1.42	33.6	9.9	5.4	4,369	0.45
Belani	18.8	21.6	40.4	1.33	28.2	19.5	4.8	4,596	0.29
Total	**130.3**	**64.4**	**194.6**	**1.37**	**34.8**	**19.9**	**5.0**	**4,132**	**0.31**

(*Note: individual totals may differ due to rounding*)

SALVA Mining Consultants

8.9 Seam by Seam Coal Reserve

Total ROM Coal Reserves for each of BSL coal concessions are reported by seam and are presented in Table 8:9 to Table 8:11.

Table 8:9 Seam by Seam Coal Reserves for Muara Lakitan at 31 December 2017

Seams	Proved Reserves Mt	Probable Reserves Mt	Total Reserves Mt	RD adb	Ash %	IM %	TM %	CV, GAR (Kcal/kg)	TS %
350	4.1	0.9	5.1	1.39	4.6	20.6	35.2	4,083	0.30
360	6.6	1.3	8.0	1.42	9.9	21.0	35.8	3,725	0.29
450	2.7	0.7	3.5	1.38	7.4	21.5	35.2	3,854	0.37
550	4.4	1.5	5.9	1.37	4.2	21.8	36.1	4,056	0.29
560	1.2	0.5	1.7	1.38	4.8	20.8	35.4	4,072	0.30
650	4.1	0.8	4.9	1.40	5.9	21.5	34.0	4,123	0.37
660	0.9	0.3	1.1	1.40	10.8	19.6	38.0	3,546	0.91
750	0.9	1.7	2.6	1.49	16.2	18.8	36.5	3,335	0.73
830	0.0	0.0	0.0	1.42	12.8	20.1	36.6	3,476	0.42
840	3.7	0.7	4.4	1.38	4.7	22.5	38.2	3,890	0.29
850	6.1	1.1	7.2	1.38	4.6	21.8	38.7	3,842	0.28
860	4.0	0.8	4.8	1.37	4.3	21.5	38.5	3,875	0.26
870	14.9	6.4	21.3	1.38	3.8	20.9	37.5	3,980	0.26
940	3.8	1.2	5.0	1.34	2.2	20.9	37.0	4,156	0.24
950	32.0	8.8	40.9	1.36	3.2	20.9	36.6	4,096	0.25
960	6.1	1.4	7.5	1.42	7.4	19.4	36.3	3,876	0.30
970	14.2	3.0	17.2	1.37	5.1	20.4	37.0	4,008	0.32
Total	**109.8**	**31.3**	**141.1**	**1.38**	**5.0**	**20.9**	**36.8**	**3,977**	**0.30**

(Note: individual totals may differ due to rounding)

Table 8:10 Seam by Seam Coal Reserves for Batukucing at 31 December 2017

Seams	Proved Reserves Mt	Probable Reserves Mt	Total Reserves Mt	RD adb	Ash %	IM %	TM %	CV, GAR (Kcal/kg)	TS %
B500	0.1	1.0	1.1	1.39	5.9	8.6	32.1	4,506	2.86
B600	0.4	2.3	2.7	1.35	4.4	10.0	33.6	4,420	0.26
B700	0.5	3.1	3.6	1.57	6.6	9.8	34.9	4,184	0.20
B820	0.1	0.4	0.5	1.38	3.1	10.7	33.9	4,452	0.17
B810	0.4	1.4	1.8	1.38	5.3	9.8	32.9	4,368	0.14
B920	-	0.7	0.7	1.36	7.2	9.6	31.8	4,467	0.28
B910	-	2.6	2.6	1.36	4.5	10.3	33.2	4,479	0.25
Total	**1.7**	**11.5**	**13.1**	**1.42**	**5.4**	**9.9**	**33.6**	**4,369**	**0.45**

(Note: individual totals may differ due to rounding)

SALVA Mining Consultants

Table 8:11 Seam by Seam Coal Reserves for Belani as at 31 December 2017

Seams	Proved Reserves Mt	Probable Reserves Mt	Total Reserves Mt	RD adb	Ash %	IM %	TM %	CV, GAR (Kcal/kg)	TS %
E420	1.3	1.4	2.7	1.35	3.4	21.8	32.5	4,471	0.46
E410	-	0.1	0.1	1.34	1.6	24.5	31.3	4,649	0.18
E600	0.0	0.0	0.0	1.32	1.0	16.1	30.0	4,880	0.17
E720	2.7	0.3	2.9	1.31	3.2	21.0	31.0	4,515	0.50
E710	0.4	0.0	0.4	1.36	5.2	18.9	30.0	4,692	0.27
E820	1.4	0.2	1.6	1.40	12.1	17.1	29.1	3,910	2.56
E810	2.4	0.2	2.6	1.37	9.2	17.6	27.3	4,296	0.30
E920	1.2	3.5	4.6	1.35	6.2	20.0	27.6	4,582	0.14
E910	9.4	16.0	25.4	1.31	3.9	19.3	27.5	4,693	0.13
Total	**18.8**	**21.6**	**40.4**	**1.33**	**4.8**	**19.5**	**28.2**	**4,596**	**0.29**

(Note: individual totals may differ due to rounding)

8.10 Comparison with Previous Estimates

Current Reserves (Dec 2017) are similar to the previous estimate of April 2017.

Minarco previously estimated Coal Resource and Reserves for BSL Project as at 31 December 2007. HDR estimated Coal Resource and Reserves for BSL Project as at 1 June 2013 based on modifying factors and long term coal prices forecasts (US$45/t). HDR subsequently updated the Coal Reserves for Muara Lakitan in May 2015 based on updated view on long term coal prices (US$32).

2017 Coal Reserves estimates are based on the changed economic circumstances in terms of existing contractor rates and the long term forecast on the coal prices from PT Bara Sentosa Lestari blocks.

Table 8:12 Coal Reserve - Comparison with Previous Estimates, ML block

	Coal Reserves (Mt)				
	Salva Mining Dec 2017	Salva Mining Apr 2017	HDR 2015	HDR 2013	Minarco 2008
ML	141.1	141.1	93.9	108.5	104.0
BL	40.4	40.4		32.6	16.8
BK	13.1	13.1		11.1	8.7
Total	194.6	194.6		152.2	129.5

SALVA
Mining Consultants

9 JORC Table 1

This Coal Reserve Report has been carried out in recognition of the 2012 JORC Code published by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy, the AIG and the Minerals Council of Australia in 2012. Under the report guidelines all geological and other relevant factors for this deposit are considered in sufficient detail to serve as a guide to on-going development and mining.

In the context of complying with the Principles of the Code, Table 1 of the JORC code (Appendix A) has been used as a checklist by Salva Mining in the preparation of this report and any comments made on the relevant sections of Table 1 have been provided on an 'if not, why not' basis. This has been done to ensure that it is clear to an investor whether items have been considered and deemed of low consequence or have yet to be addressed or resolved.

The order and grouping of criteria in Table 1 reflects the normal systematic approach to exploration and evaluation. Relevance and Materiality are the overriding principles which determine what information should be publicly reported and Salva Mining has attempted to provide sufficient comment on all matters that might materially affect a reader's understanding or interpretation of the results or estimates being reported. It is important to note that the relative importance of the criteria will vary with the particular project and the legal and economic conditions pertaining at the time of determination.

In some cases, it may be appropriate for a Public Report to exclude some commercially sensitive information. A decision to exclude commercially sensitive information would be a decision for the company issuing the Public Report, and such a decision should be made in accordance with any relevant corporation regulations in that jurisdiction.

In cases where commercially sensitive information is excluded from a Public Report, the report should provide summary information (for example the methodology used to determine economic assumptions where the numerical value of those assumptions is commercially sensitive) and context for the purpose of informing investors or potential investors and their advisers.

SALVA
Mining Consultants

10 References

ASIC, 2011. Regulatory Guide 112: Independence of Experts. Australian Securities & Investments Commission [online]. Available from: <http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/rg112-30032011.pdf/$file/rg112-30032011.pdf> [Accessed 22 August 2017].

JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code – 2012 Edition [online], The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia. Available from: <http://www.jorc.org/pdf/jorc2012web_v2.pdf> [Accessed: 31 January 2018].

Chris Hansen, Muara Lakitan Coal Resource – Prefeasibility Geo-Technical Assessment, August 2009

Preliminary Report on Groundwater Assessment, Muara Lakitan Coal Project Bankable Feasibility Study by Australian Groundwater & Environmental Consultants Pty Ltd (AGE), July 2009

Minarco Mine Consult - Statement of open cut coal resources and reserves, 2008

HDR - Statement of open cut coal resources and reserves, 2013.

HDR - Statement of open cut coal reserves, 2015.

SALVA
Mining Consultants

Appendix A: CVs

Person	Role
Manish Garg (Director - Consulting)	
Qualification	B. Eng. (Hons), MAppFin
Prof. Membership	MAusIMM; MAICD
Contribution	Overall Supervision, Economic Assessment (VALMIN 2005)
Experience	Manish has more than 25 years' experience in mining Industry. Manish have worked for mining majors including Vedanta, Pasminco, WMC Resources, Oceanagold, BHP Billiton - Illawarra Coal and Rio Tinto Coal. Manish has been in consulting roles for past 10 years predominately focusing on feasibility studies, due diligence, valuations and M&A area. A trusted advisor, Manish has qualifications and wide experience in delivering due diligences, feasibility studies and project valuations for banks, financial investors and mining companies on global projects, some of these deals are valued at over US$5 billion.
Sonik Suri (Principal Consultant - Geology)	
Qualification	B. Sc. (Hons), M.Sc. (Geology)
Prof. Membership	MAusIMM
Contribution	Geology, Resource (JORC 2012)
Experience	Sonik has more than 25 years of experience in most aspects of geology including exploration, geological modelling, resource estimation and mine geology. He has worked for coal mining majors like Anglo American and consulting to major mining companies for both exploration management and geological modelling. As a consultant he has worked on audits and due diligence for companies within Australia and overseas. He has strong expertise in data management, QA/QC and interpretation; reviews/audits of geological data sets; resource models and resource estimates.
Dr Ross Halatchev (Principal Consultant - Mining)	
Qualification	B. Sc. (Mining), M.Sc., Ph.D. (Qld)
Prof. Membership	MAusIMM
Contribution	Mine Scheduling, Reserve (JORC 2012)
Experience	Ross is a mining engineer with 30 years' experience in the mining industry across operations and consulting. His career spans working in mining operations and as a mining consultant primarily in the mine planning & design role which included estimation of coal reserves, DFS/FS, due diligence studies, techno-commercial evaluations and technical inputs for mining contracts. Prior to joining Salva Mining, Ross was working as Principal Mining Engineer at Vale. To date Ross has worked on over 20 coal projects around the world, inclusive of coal projects in Australia, as well as in major coalfields in Indonesia, Mongolia and CIS.

SALVA Mining Consultants

Appendix B: JORC Table 1

Criteria	Explanation	Comment
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips etc.) and measures taken to ensure sample representivity.	Across all blocks (Muara Lakitan, Batukucing and Belani), Chip samples were collected at every 1m for lithology logging. Sampled all cored coal, sampled separately any bands and taken 10cm of roof and floor for non-coal samples. Drill cores were sampled on a "ply-by-ply" basis based on geophysical logs and physical inspection of the cores;
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka etc.) and details (e.g. 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.).	Used man-portable top drive hydraulic rigs, capable of HQ3 coring for all sub blocks.
Drill sample recovery	Whether core and chip sample recoveries have been properly recorded 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.	After the completion of each core run, core loss is determined by the on-site geologist and recorded in the drill hole completion sheet. If recovery is found to be less than 90% within a coal seam intersection, the hole is re-drilled in order to re-sample this seam with greater than 90% core recovery. All samples with less than 90% core recovery over the width of the seam intersection were excluded from the coal quality database. Followed drilling, SOP's for loose and carbonaceous formations to achieve full sample recovery.
Logging	Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.	Across all blocks, detailed logging of chips and core was done for almost all samples. This was supplemented with the photographs for the drill cores. At Belani, three drill holes could not be geophysical logged because of hole collapse which result in only 98 drill holes were available for the Resource Model construction.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split etc. and whether sampled wet or dry.	

Criteria	Explanation	Comment
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No sub-sampling of the core in any of the coal block.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected. Whether sample sizes are appropriate to the grainsize of the material being sampled.	
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Assay for the coal samples obtained at Muara Lakitan block was done at PT Geoservices (DSI & Banpu period 2004-2007) and PT Intertek Utama Services (GMR period 2009) are accredited laboratories to ISO 17025 standards. Assay for the coal samples obtained at Batukucing and Belani blocks, was done in accordance with the appropriate ISO 17025 standards by PT Geoservices laboratories in Bandung. PT. Geoservices laboratories are accredited to ISO 17025 standards. Coal quality laboratory adheres to internal QAQC and inter-laboratory QAQC checks. ISO methods have been used for MHC tests. Australian Standards have been used for RD and American Society for testing and materials (ASTM) methods have been used for all other quality variables. Geophysical traces were observed to be generally of good quality.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	Coal quality sampling undertaken by GMR Energy. Visual inspection on site was carried out by site geologists. Twinned holes drilled in order to improve core recovery show good agreement in terms of intersection depths.
Location of data points	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.	Borehole collars have been surveyed using standard total station techniques employed by the survey contractors. For all three blocks (Muara Lakitan, Batukucing and Belani), survey have been validated by GMR Energy Ltd survey staff. The surveyed borehole locations match well with topographic data.

Criteria	Explanation	Comment
		The topography was generated for each of the project areas using LiDAR remote sensing data. All drill holes used for the Resources Models have surveyed collar positions
	Quality and adequacy of topographic control.	
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Data spacing sufficient to establish continuity in both thickness and coal quality for all three blocks (Muara Lakitan, Batukucing and Belani),
	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.	These data sets include topography and base of weathering as well as seam structure and coal quality. Ply sampling methodology used.
	Whether sample compositing has been applied.	Sample compositing has been applied at all three blocks.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Ply by Ply sampling used therefore orientation of sampling not seen to introduce bias as all drilling is vertical.
	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.	
Sample Security	The measures taken to ensure sample security	Proper measures for sample security were taken.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits of sampling etc. done however comprehensive set of internal company procedures exist and are adhered to by all GMR Staff.
Mineral tenement and Land tenure status	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.	All tenure is secured and currently available.
	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.	

SALVA Mining Consultants

Criteria	Explanation	Comment
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	At Muara Lakitan, exploration was done in 2004-2005 by Banpu, in 2007 by DSI and in 2009 by GMR. At Batukucing, PT Rekasindo Guriang Tandang carried out exploration on behalf of DSI in 2007. At Belani, most of the exploration drilling was carried out by GMR in 2009.
Geology	Deposit type, geological setting and style of mineralisation.	The geology of individual blocks has been discussed in detail in JORC Resource Report
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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 examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	All samples have been composited over full seam thickness and reported using Minescape modelling software. No Metal equivalent used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down-hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	Ply sampling methodology prevents samples from crossing ply boundaries. Therefore, orientation of sampling not seen to introduce bias as all drilling is vertical and seams mostly gently dipping.
Diagrams	Where possible, maps and sections (with scales) and tabulations of intercepts should be included for any material discovery being reported if such diagrams significantly clarify the report.	See figures and Appendices of this report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be	No reporting of exploration results.

Criteria	Explanation	Comment
	practised to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	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.	At Muara Lakitan, out of the total 452 drill-holes, a total of 349 holes have been geo-physically logged. At Batukucing, out of 136 holes, 83 drill holes were geo-physically logged. At Belani, out of 98 holes, 76 drill holes were geo-physically logged.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work will be necessary at all three blocks (Muara Lakitan, Batukucing and Belani), to improve the confidence levels of the coal quality estimate if inferred resources are present in areas planned for mining. No exploration plan has been proposed in this report.
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	The database for all blocks is considered of an acceptable standard to report a JORC Resource. Drillhole data used to construct Minescape model. Checks against original down hole geophysics (las) files used to verify data during modelling.
	Data validation procedures used.	
Site Visits	Site Visits undertaken by the Competent Person and the outcome of these visits. If no site visits have been undertaken, indicate why this is the case	Frequent site visit by QP and Principal Mining Engineer (CP for Reserving) during 2014, 2015, 2016 and 2017 (last visit Oct 2017). Geological site visit was previously conducted in February 2017. Geology had been well documented by CP during previous report. Salva Mining's geologist has reviewed and discussed the available geological data in companies office in Jakarta.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation.	High degree of confidence in seam picks made using down hole geophysical data.
	The use of geology in guiding and controlling Mineral Resource estimation.	The geological models created for all of the blocks considered to accurately represent the deposits.

Criteria	Explanation	Comment
	The factors affecting continuity both of grade and geology.	No major faults have been reported. Current Minescape model tonnes agree with previous model by HDR model to within 10% error margin, excluding the effect of different classification distances.
Dimensions	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.	See figures and Appendices in the Report.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	FEM interpolator used for surface elevation, thickness and trend. Inverse distance squared used for coal quality throughout. Based on experienced gained in the modelling of over 40 coal deposits around the world, the FEM interpolator is considered to be the most appropriate for structure and inverse distance the most appropriate for coal quality. Grid cell size of 20 m for the topographic model, 20 m for the structural model. Additional model construction parameters in relevant sections of this Resource Report
	The assumptions made regarding recovery of by-products.	Visual validation of all model grids performed. Current Minescape model tonnes agree with previous model by Minarco Minex model to within 10% error margin, excluding the effect of different classification distances.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	N. A
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units.	N. A
	Any assumptions about correlation between variables. The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	

Criteria	Explanation	Comment
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	All tonnages estimated on air dried basis as no MHC to do Preston Sanders. This results in around 15% overestimation as opposed to using insitu moisture basis
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The coal resources contained in this report are confined within the concession boundary. The resources were limited to 150m below topography. A minimum ply thickness of 10cm and maximum thickness of 30cm was used for coal partings.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.	Mining has commenced at Belnai. It is proposed to mine the Muara Lakitan pit as open pit excavations by truck and excavator method.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.	N/A in situ air dried tonnes quoted.
Environmental factors or assumptions	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.	Environmental approvals including AMDEL in place.
Bulk density	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.	N/A in situ air dried tonnes quoted.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	Classification distances based on an assessment of the variability of critical variables through statistical analysis and by an assessment of the

Criteria	Explanation	Comment
		degree of geological complexity. Classification radii for the three resource categories are:
	Whether appropriate account has been taken of all relevant factors. i.e. relative confidence in tonnage/grade computations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.	Measured: 500m Indicated: 1000m Inferred: 2000m
	Whether the result appropriately reflects the Competent Person(s)' view of the deposit.	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Reconciliation exercises between planned and actual mining is planned on an ongoing basis.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and/or confidence in the Mineral Resource estimate using an 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 which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages or volumes, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Spacing ranges for the three resource categories are considered to adequately reflect the degree of confidence in the underlying estimate on a global basis. Significant local variation to estimated values may arise which should be addressed by adequate grade control procedures.
Mineral Resource Estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Basis of the estimates is JORC Resource Statement for Muara Lakitan, Batukucing and Belani blocks of Bara Sentoso Lestari as at 31 December 2017. Coal resources is inclusive of Coal reserves.

SALVA Mining Consultants

Criteria	Explanation	Comment
Site Visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Frequent site visit by QP and Principal Mining Engineer (CP for Reserving) during 2014, 2015, 2016 and 2017 (last visit Oct 2017).
	If no site visits have been undertaken indicate why this is the case.	
Study Status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	Mining has commenced at BL Pit. It is proposed to mine all the pits as open pit excavations by truck and excavator method.
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The mine has prepared a detailed Life of Mine (LOM) plan for the mining operations.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Refer Table 8:1 – Modifying factors for pit optimisation and Table 8:2, Break even Stripping Ratio analysis
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc.), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	Refer Table 8:1 Modifying Factors and Pit Optimisation Parameters and Section 8.3 on Notes on Modifying Factors. Salva Mining has used the modifying factors based on the life of mine study carried out for the Muara Lakitan block which were independently verified by the Salva Mining's subject specialist. In Salva Mining's opinion, the Modifying Factors for the BSL concessions are appropriately defined for the greenfield project at Muara Lakitan, Batukucing and Belani.

SALVA Mining Consultants

Criteria	Explanation	Comment
	The infrastructure requirements of the selected mining methods.	
Metallurgical Factors or assumptions		The coal is to be sold unwashed so no processing factors have been applied. Other than crushing to a 50-mm top size no other beneficiation will be applied.
	Whether the metallurgical process is well-tested technology or novel in nature.	
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Refer Section 8.3.6, Permits and Approvals & Section 8.3.9 Other Relevant Factors
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	Discussed in Section 8.3.5 Mine Logistic Factors
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.	Discussed in Section 8.3.7 Cost and Revenue factors

Criteria	Explanation	Comment
	The source of exchange rates used in the study.	
	Derivation of transportation charges.	
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	
	The allowances made for royalties payable, both Government and private.	
Revenue Factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	Discussed in Section 8.3.7 Cost and Revenue factors and Section 8.3.8 Marketing & Product Specifications
Market Assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals, the customer specification, testing and acceptance requirements prior to a supply contract.	Discussed in Section 8.3.8 Marketing Factors
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Economic analysis (NPV) done based on long term price outlook and the cost estimates (Contractor mining operation)
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Refer Section 8.3.6, Permits and approvals
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	Discussed under Section 8.3.9, Other Factors

Criteria	Explanation	Comment
	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	Discussed under Section 8.6, Reserve Classification
Audit & Reviews	The results of any audits or reviews of Ore Reserve estimates.	Discussed under Section 8.4, Audits & Reviews
Discussion of Relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. 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. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a	Discussed under Section 8.5, Relative Accuracy and confidence

Criteria	Explanation	Comment
	material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SALVA
Mining Consultants

Appendix C: Collars

Muara Lakitan Block drill hole collars							
Drill Hole	Easting	Northing	Elevation	Total Depth	Model Flag	Quality Flag	Reasons
B0003AT	299725.4	9693214	58.316	63.3	Yes	Yes	
B0003BT	299876.8	9693250	59.227	100.5	Yes	Yes	
B0003T	299543	9693116	45.879	42.5	Yes	No	
B0005T	299688.2	9692726	52.564	70.0	Yes	Yes	
B0006T	299821.9	9692795	61.906	80.5	Yes	Yes	
B0007T	299939.5	9692880	47.432	91.0	Yes	Yes	
B0008T	299809.1	9692364	51.400	60.5	Yes	Yes	
B0009T	299991	9692467	53.699	62.5	Yes	Yes	
B0010T	300106.1	9692530	60.426	73.0	Yes	Yes	
B0011T	299965.4	9691987	49.332	65.0	Yes	Yes	
B0012T	300128.8	9692068	42.796	60.5	Yes	Yes	
B0013T	300327.4	9692178	58.640	77.5	Yes	Yes	
B0014AT	300078.8	9691569	56.212	52.0	Yes	Yes	
B0014T	299963.9	9691484	46.305	41.0	No	No	No Lith and Quality data
B0015T	300199.6	9691627	53.452	65.0	Yes	Yes	
B0016T	300352.4	9691708	66.148	85.0	Yes	Yes	
B0017T	300539.3	9691823	55.460	61.0	Yes	Yes	
B0018T	300103.5	9690958	37.886	62.0	No	No	No Lith and Quality data
B0019T	300283.1	9691087	53.286	60.0	Yes	Yes	
B0020T	300442.3	9691200	49.506	79.8	Yes	Yes	
B0021T	300678.2	9691357	65.760	50.0	Yes	Yes	
B0022T	300563.1	9690504	45.842	57.5	Yes	Yes	
B0023T	300742.1	9690715	43.508	70.0	Yes	Yes	
B0024T	300878.3	9690892	56.978	70.0	Yes	Yes	
B0025T	301036.7	9691096	57.649	60.0	Yes	Yes	
B0026T	301041.8	9690358	44.139	50.0	Yes	Yes	
B0027T	301212.8	9690636	49.135	71.0	Yes	Yes	
B0028AT	301389.2	9690933	49.528	73.0	Yes	Yes	
B0028T	301334	9690821	53.797	81.5	Yes	Yes	
B0029AT	301457.3	9690275	48.380	40.0	Yes	Yes	
B0029T	301409.9	9690187	51.944	40.0	Yes	Yes	
B0030AH	301654.1	9690568	59.855	71.0	Yes	No	
B0030T	301586.5	9690457	54.345	50.0	Yes	Yes	
B0031T	301719.9	9690664	66.137	60.0	Yes	Yes	
B0032T	301823.1	9690829	59.761	55.0	Yes	Yes	
B0034AH	302050.6	9690436	58.953	61.0	Yes	No	
B0034T	301993.1	9690348	49.528	45.0	Yes	Yes	
B0035T	302103.4	9690520	62.825	65.2	Yes	Yes	
B0036T	302174.8	9690628	62.372	73.0	Yes	Yes	

SALVA
Mining Consultants

Muara Lakitan Block drill hole collars							
Drill Hole	Easting	Northing	Elevation	Total Depth	Model Flag	Quality Flag	Reasons
B0037H	299473.3	9693309	51.982	50.5	Yes	No	
B0038H	299613	9693389	56.762	61.0	Yes	No	
B0039H	299761.4	9693495	66.092	67.0	Yes	No	
B0040H	299529	9692871	43.300	42.0	No	No	No Lith and Quality data
B0041H	299717.9	9692984	59.569	68.0	Yes	No	
B0042G	299793.2	9693034	62.337	76.0	Yes	Yes	
B0043H	299946.1	9693096	63.156	82.5	Yes	No	
B0045H	299773.5	9692553	49.281	61.5	Yes	No	
B0046H	299863.9	9692613	59.192	60.0	Yes	No	
B0047H	300055.4	9692718	60.045	102.0	Yes	No	
B0048H	299746.5	9692092	52.316	40.0	No	No	No Lith and Quality data
B0049H	299911	9692181	46.822	66.0	Yes	No	
B0050H	300045.4	9692253	50.055	85.0	Yes	No	
B0051H	300165.1	9692320	57.583	90.0	Yes	No	
B0052G	300062.7	9691798	58.861	47.0	Yes	Yes	
B0053G	300168.2	9691857	58.255	74.9	Yes	Yes	
B0054H	300271.7	9691909	61.530	93.0	Yes	No	
B0056AH	300321.2	9691428	51.762	76.5	Yes	No	
B0056H	300230.3	9691386	46.080	57.0	Yes	No	
B0057H	300430.5	9691499	58.234	75.5	Yes	No	
B0059H	300430	9690785	48.633	51.5	Yes	No	
B0060H	300529.1	9690876	49.508	61.0	Yes	No	
B0061H	300685.8	9691041	40.557	60.0	Yes	No	
B0062H	300836.7	9691198	60.342	60.0	Yes	No	
B0063H	300837.2	9690421	49.229	65.0	Yes	No	
B0064H	300969.8	9690609	52.503	64.5	Yes	No	
B0065H	301050.7	9690742	41.349	66.9	Yes	No	
B0067H	301292.3	9690394	51.389	50.0	Yes	No	
B0068H	301359.3	9690509	51.784	66.0	Yes	No	
B0069G	301410	9690596	58.502	100.0	Yes	Yes	
B0070H	301541	9690778	63.496	73.0	Yes	No	
B0071H	301627.2	9690909	59.613	73.0	Yes	No	
B0074H	301784	9690366	43.065	48.5	Yes	No	
B0075H	301891.8	9690549	62.289	75.0	Yes	No	
B0076H	302010.5	9690748	67.033	73.0	Yes	No	
B0077H	302101.5	9690868	57.156	73.0	Yes	No	
B0080AH	302342.6	9690520	52.193	71.5	Yes	No	
B0080BH	302283.5	9690430	56.080	83.0	Yes	No	
B0080H	302233.7	9690381	52.837	60.0	Yes	No	
B0081H	302382.5	9690628	59.029	70.5	Yes	No	

SALVA
Mining Consultants

Muara Lakitan Block drill hole collars							
Drill Hole	Easting	Northing	Elevation	Total Depth	Model Flag	Quality Flag	Reasons
B0083AT	302620.4	9690151	47.551	60.0	Yes	Yes	
B0083H	302651.3	9690223	57.645	66.5	Yes	No	
B0084AT	302735.4	9690372	62.980	80.0	Yes	Yes	
B0084H	302698.4	9690299	59.483	83.0	Yes	No	
B0086H	303023.3	9690061	57.765	81.0	Yes	No	
B0087AT	303137.1	9690243	60.839	72.0	Yes	Yes	
B0087H	303078.1	9690145	69.502	85.0	Yes	No	
B0088H	303324.7	9689754	51.052	66.0	Yes	No	
B0089H	303403.5	9689882	44.164	83.0	Yes	No	
B0090T	303465.9	9689973	49.807	85.0	Yes	Yes	
B0091T	303690.7	9689635	58.852	68.0	Yes	Yes	
B0092AT	303806.5	9689807	62.495	82.0	Yes	Yes	
B0092H	303751.8	9689715	62.845	74.0	Yes	No	
B0093T	303863.4	9689880	57.892	77.0	Yes	Yes	
B0094T	304015.7	9689397	60.527	62.0	Yes	No	
B0095H	304082.5	9689448	63.931	83.0	No	No	No Lith and Quality data
B0096H	304167.3	9689597	56.306	72.0	Yes	No	
B0098T	304322.8	9689123	43.929	94.5	Yes	Yes	
B0099T	304444.4	9689271	37.920	82.5	Yes	Yes	
B0100T	304493.9	9689345	21.726	82.5	Yes	Yes	
B0101H	304652	9688843	59.877	76.5	Yes	No	
B0102AT	304705	9688922	55.368	70.0	Yes	Yes	
B0102T	304716	9688998	66.162	75.0	Yes	No	
B0104AT	304919.7	9688543	46.856	53.0	Yes	Yes	
B0104T	304967.7	9688659	54.176	82.0	Yes	Yes	
B0105AT	305077.9	9688827	59.654	67.0	Yes	Yes	
B0105T	305023.6	9688750	57.797	99.5	Yes	Yes	
B0106AT	305226.9	9688313	59.838	65.0	Yes	Yes	
B0106H	305279.9	9688371	66.718	77.0	Yes	No	
B0107T	305318	9688462	61.518	75.0	Yes	Yes	
B0108T	305384.6	9688539	52.489	72.0	Yes	Yes	
B0109H	305537.9	9687985	53.327	45.0	Yes	No	
B0110H	305594.9	9688067	65.533	70.0	Yes	No	
B0111T	305646.6	9688159	64.617	73.0	Yes	Yes	
B0112T	305910.7	9687770	46.573	84.0	Yes	Yes	
B0113T	305916.3	9687853	55.261	77.0	Yes	Yes	
B0114AT	306008.5	9688030	66.138	61.5	Yes	Yes	
B0114T	306005.2	9687915	66.739	84.0	Yes	Yes	
B0117AT	306280	9687717	49.826	104.0	Yes	Yes	
B0117BT	306351.7	9687820	46.538	83.0	Yes	Yes	

SALVA
Mining Consultants

Muara Lakitan Block drill hole collars							
Drill Hole	Easting	Northing	Elevation	Total Depth	Model Flag	Quality Flag	Reasons
B0117T	306218.5	9687637	62.879	92.0	Yes	Yes	
B0120AT	306615.8	9687454	52.379	87.5	Yes	Yes	
B0120BT	306692.8	9687517	63.068	83.0	Yes	Yes	
B0120CT	306755.8	9687587	60.367	92.5	Yes	Yes	
B0120T	306535.7	9687374	43.120	85.0	Yes	Yes	
B0122T	306788	9687050	52.762	63.0	Yes	Yes	
B0123AT	306893.6	9687204	61.111	81.0	Yes	No	
B0123G	306851.5	9687167	60.321	102.0	Yes	Yes	
B0123T	306827.4	9687118	53.758	83.0	Yes	Yes	
B0124T	306971.1	9686603	48.473	62.0	Yes	Yes	
B0125AT	307092.6	9686777	48.041	84.0	Yes	Yes	
B0125T	307022.5	9686685	36.060	62.0	Yes	Yes	
B0126G	307059.7	9686085	41.157	78.0	Yes	Yes	
B0126T	307100.9	9686140	46.061	86.0	Yes	Yes	
B0127AT	307193.9	9686275	46.454	70.0	Yes	Yes	
B0127BT	307250.9	9686361	35.750	65.5	Yes	Yes	
B0127T	307143.7	9686210	49.354	76.0	Yes	Yes	
B0128AT	307448.8	9685929	49.363	68.0	Yes	Yes	
B0128T	307505.6	9686003	54.446	80.0	Yes	Yes	
B0129T	307578.5	9686087	42.891	75.0	Yes	Yes	
B0130AT	307781.7	9685717	42.170	75.0	Yes	No	
B0130T	307885.9	9685847	31.214	63.0	Yes	Yes	
B0131T	307951.4	9685907	45.410	73.0	Yes	Yes	
B0132AT	308134.1	9685550	36.309	76.0	Yes	Yes	
B0132T	308044.9	9685454	27.115	65.0	Yes	Yes	
B0140AT	298916.8	9696354	54.832	77.0	Yes	No	
B0141T	298929.8	9695836	46.910	80.0	Yes	No	
B0143AT	299101.7	9695375	60.088	75.0	Yes	No	
B0144AT	299389.3	9694645	62.295	88.7	Yes	Yes	
B0144BT	299322.4	9694571	70.337	77.0	Yes	No	
B0144T	299216.9	9694875	55.595	76.5	Yes	Yes	
B0145AT	299401	9694357	56.808	72.0	Yes	Yes	
B0145BT	299503.7	9694432	58.931	75.0	Yes	Yes	
B0145CT	299332	9694323	60.850	71.0	Yes	Yes	
B0145T	299325.5	9694928	66.454	74.0	Yes	Yes	
B0146AT	299579.4	9694233	51.222	74.0	Yes	Yes	
B0146BT	299491	9694181	61.331	93.0	Yes	Yes	
B0146CT	299406.6	9694133	61.511	79.0	Yes	Yes	
B0146T	299145	9694808	58.649	72.0	Yes	No	
B0147AT	299591	9693901	50.473	86.0	Yes	Yes	

SALVA
Mining Consultants

Muara Lakitan Block drill hole collars							
Drill Hole	Easting	Northing	Elevation	Total Depth	Model Flag	Quality Flag	Reasons
B0147BT	299411.1	9693792	49.674	51.0	Yes	Yes	
B0147T	299496.8	9693845	54.099	70.0	Yes	Yes	
B0149AT	299566.5	9693695	56.426	81.0	Yes	Yes	
B0149BT	299739.6	9693799	65.567	82.5	Yes	Yes	
B0149T	299671.3	9693720	62.556	86.0	Yes	Yes	
ML002	300022.4	9692020	51.610	81.0	Yes	No	
ML002C	300020.7	9692015	51.792	40.0	Yes	No	
ML003	301874	9690513	58.611	73.0	Yes	No	
ML004	302462.5	9690310	64.535	40.0	Yes	No	
ML005	302496.8	9690380	53.270	80.0	Yes	No	
ML006	302582	9690520	62.271	43.0	Yes	No	
ML007	302745.1	9690414	58.049	55.0	Yes	No	
ML008	302783	9690085	61.524	35.5	Yes	No	
ML009	302856.4	9690207	52.437	66.0	Yes	No	
ML010	302874.5	9690257	53.779	35.5	No	No	No Lith and Quality data
ML011	303184.7	9690269	60.973	49.0	Yes	No	
ML012	303178.9	9689939	58.305	36.0	Yes	No	
ML013	303222	9690008	56.108	65.5	Yes	No	
ML014	303279.6	9690108	61.115	31.0	Yes	No	
ML014C	303283.7	9690119	62.205	18.0	Yes	No	
ML015	303548.2	9689753	43.301	51.0	Yes	No	
ML016	303578.8	9689824	58.476	80.0	Yes	No	
ML017	303675	9689982	52.075	40.0	Yes	No	
ML018	303796.9	9689444	70.013	40.0	Yes	No	
ML019	303834.3	9689504	70.125	70.0	Yes	No	
ML020	303969.7	9689724	67.163	45.0	Yes	No	
ML021	304128.8	9689203	70.289	63.0	Yes	No	
ML022	304284.2	9689445	78.170	30.0	Yes	No	
ML023	304478.8	9688977	75.396	63.0	Yes	No	
ML024	304495.1	9689003	76.672	81.0	Yes	No	
ML025	304635.5	9689218	61.420	45.0	Yes	No	
ML026	304781.3	9688741	73.394	51.0	Yes	No	
ML027	304815.6	9688797	72.377	75.0	Yes	No	
ML028	304923.7	9688975	62.810	52.0	Yes	No	
ML029	305098.4	9688854	64.504	65.0	Yes	No	
ML030	305076.1	9688469	60.855	40.0	Yes	No	
ML031	305112.4	9688528	49.965	50.0	Yes	No	
ML032	305225.9	9688718	60.142	40.0	Yes	No	
ML033	305406.6	9688584	52.991	80.0	Yes	No	
ML034	305376.8	9688176	53.482	40.0	Yes	No	

SALVA
Mining Consultants

Muara Lakitan Block drill hole collars							
Drill Hole	Easting	Northing	Elevation	Total Depth	Model Flag	Quality Flag	Reasons
ML034C	305374.9	9688177	53.455	35.5	Yes	No	
ML035	305417.5	9688231	58.737	72.0	Yes	No	
ML036	305529.7	9688427	50.309	31.0	Yes	No	
ML036C	305534.1	9688424	50.302	21.0	Yes	No	
ML037	305710.9	9687919	49.603	37.0	Yes	No	
ML038	305753	9687979	44.039	67.0	Yes	No	
ML039	305831.4	9688105	72.376	45.0	Yes	No	
ML040	306054.1	9687764	57.307	84.0	Yes	No	
ML041	306012.4	9687696	65.473	60.0	Yes	No	
ML042	306146.7	9687910	61.745	36.0	Yes	No	
ML043	306920	9687556	34.876	54.0	No	No	No Lith and Quality data
ML044	306397.9	9687604	45.221	81.0	Yes	No	
ML045	306640.2	9687233	50.803	32.0	Yes	No	
ML046	306700.4	9687308	54.666	76.0	Yes	No	
ML047C	306913.7	9686924	36.975	42.0	Yes	No	
ML048	306961.5	9686995	49.100	82.5	Yes	No	
ML049	307028.6	9686377	36.709	41.5	Yes	No	
ML050	307077.2	9686454	30.712	54.0	Yes	No	
ML051	307249.3	9686041	29.037	37.3	Yes	No	
ML052	307292.8	9686099	27.987	46.0	Yes	No	
ML053	307600.4	9685818	46.882	52.0	Yes	No	
ML055	307748.3	9686024	47.084	52.5	Yes	No	
ML056	307825.8	9685466	31.576	85.0	Yes	No	
ML057	307806.1	9685438	43.161	84.0	Yes	No	
ML058	307959.4	9685659	30.378	40.0	Yes	No	
MLC059	298626	9697800	48.760	41.0	Yes	No	
MLC060	298693.3	9697819	49.440	79.0	Yes	No	
MLC061	298660.1	9697282	59.490	63.0	Yes	No	
MLC062	298801.5	9697322	57.100	81.0	Yes	No	
MLC063	298804.2	9696721	54.660	49.5	Yes	No	
MLC064	298883.2	9696759	60.680	79.2	Yes	No	
MLC064C	298881	9696756	61.230	15.0	Yes	No	
MLC065	298733	9696699	50.850	46.5	Yes	No	
MLC065C	298752.5	9696705	52.910	18.0	Yes	No	
MLC066	298820.4	9696318	54.800	42.0	Yes	No	
MLC067	299032.9	9695862	47.010	81.0	Yes	No	
MLC068	298957.6	9695307	57.590	30.0	Yes	No	
MLC069	299100.9	9694778	53.340	46.0	Yes	No	
MLC070	299280.9	9694532	64.730	75.0	Yes	No	
MLC070C	299281.8	9694527	64.660	54.0	Yes	No	

SALVA
Mining Consultants

Muara Lakitan Block drill hole collars							
Drill Hole	Easting	Northing	Elevation	Total Depth	Model Flag	Quality Flag	Reasons
MLC071	299272.6	9694295	58.410	45.0	Yes	No	
MLC072	299344.6	9694084	59.760	49.0	Yes	No	
MLC073	299527.7	9693642	61.020	62.5	Yes	No	

Batukucing Drillhole Collars						
Drill Hole No.	Easting	Northing	Elevation	Total depth	Model Flag	Reasons
BB01	299,102.3	9,705,868.8	39.4	39.3	No	No LAS
BB02	299,148.1	9,705,896.1	43.9	59.4	Yes	
BB05	299,268.6	9,705,675.5	26.6	79.4	Yes	
BB06	299,218.4	9,705,646.7	26.8	65.2	Yes	
BB06C	299,217.9	9,705,647.6	26.8	81.0	Yes	
BB07	299,187.9	9,705,628.1	26.6	81.0	Yes	
BB08	299,286.3	9,705,394.2	32.4	81.0	Yes	
BB09	299,339.5	9,705,424.4	40.3	90.0	Yes	
BB10	299,214.8	9,705,353.8	39.0	81.0	Yes	
BB11	299,534.9	9,705,546.7	29.5	79.2	No	Replaced by Core Hole
BB11C	299,535.6	9,705,548.4	29.4	81.0	Yes	
BB12	299,361.5	9,705,149.8	30.6	78.0	Yes	
BB13	299,320.5	9,705,125.9	34.5	78.6	Yes	
BB14	299,228.2	9,705,071.4	44.8	72.0	Yes	
BB15	299,389.8	9,704,879.0	39.3	81.0	Yes	
BB16	299,415.6	9,704,891.1	44.9	62.9	Yes	
BB16C	299,419.2	9,704,895.5	41.3	81.0	Yes	
BB17	299,671.9	9,705,043.7	32.2	72.0	Yes	
BB18	299,415.6	9,704,967.6	49.2	81.0	Yes	
BB20	299,600.8	9,704,710.2	32.5	81.0	Yes	
BB21	299,475.6	9,704,637.0	34.7	81.0	Yes	
BKG017	299,682.3	9,703,884.6	43.8	81.0	Yes	
BKG018	299,755.0	9,703,931.9	33.7	80.0	Yes	
BKG019	299,881.5	9,704,004.2	30.5	80.0	Yes	
BKG020	300,124.9	9,704,142.1	47.4	307.8	No	No LAS
BKG021	300,030.7	9,703,512.7	39.5	82.5	Yes	
BKG021C	300,030.2	9,703,513.6	39.4	50.0	Yes	
BKG022	300,077.0	9,703,538.6	42.1	87.0	Yes	
BKG022C	300,070.7	9,703,539.2	41.4	35.0	Yes	
BKG023	300,162.4	9,703,588.7	47.7	94.5	Yes	
BKG024	300,356.5	9,703,705.4	37.4	94.5	Yes	
BKG025	300,263.9	9,703,065.3	50.3	79.5	Yes	

SALVA
Mining Consultants

Batukucing Drillhole Collars						
Drill Hole No.	Easting	Northing	Elevation	Total depth	Model Flag	Reasons
BKG026	300,431.7	9,703,169.0	43.0	80.5	Yes	
BKG027	300,561.9	9,703,242.8	34.8	128.3	Yes	
BKG028	300,620.8	9,703,275.2	49.7	78.0	Yes	
BKG029	300,604.6	9,702,689.8	37.5	81.0	Yes	
BKG029C	300,615.7	9,702,693.2	37.3	30.0	Yes	
BKG030	300,683.4	9,702,736.0	43.8	81.0	Yes	
BKG030C	300,683.0	9,702,734.2	43.9	65.0	Yes	
BKG031	300,776.9	9,702,791.0	31.6	81.0	Yes	
BKG032	300,822.1	9,702,817.6	39.6	256.4	Yes	
BKG033	300,865.2	9,702,259.6	46.4	87.0	Yes	
BKG034	300,935.9	9,702,304.4	48.1	81.3	Yes	
BKG035	301,007.5	9,702,333.4	53.0	80.0	Yes	
BKG036	301,122.2	9,702,414.9	51.9	81.0	Yes	
BKG037	301,827.7	9,700,219.3	51.4	80.0	Yes	
BKG038	301,230.5	9,701,894.2	43.2	81.0	Yes	
BKG038C	301,231.2	9,701,895.4	43.4	84.0	Yes	
BKG039	301,281.4	9,701,937.6	37.3	79.5	No	Replaced by Core Hole - depth difference of 9m
BKG039C	301,279.4	9,701,936.5	37.3	84.0	Yes	
BKG040	301,339.9	9,701,949.4	50.1	79.5	Yes	
BKG040B	301,361.3	9,701,975.7	49.2	78.8	Yes	
BKG041A	301,467.4	9,701,459.5	45.7	50.0	Yes	
BKG043	301,641.0	9,701,556.9	41.7	78.0	No	no lithology
BKG044	301,689.0	9,701,586.8	38.0	279.5	No	LAS to 63m, bad caliper
BKG045	301,621.2	9,700,966.7	40.9	81.0	Yes	
BKG046	301,711.5	9,701,021.4	55.3	193.1	Yes	
BKG047	301,657.4	9,700,981.0	44.3	81.0	Yes	
BKG048	301,825.0	9,701,084.8	29.8	81.0	Yes	
BKG049	301,821.2	9,700,505.1	51.1	79.5	Yes	
BKG050	301,905.8	9,700,554.6	35.4	81.0	Yes	
BKG051	301,990.1	9,700,604.7	37.8	81.0	Yes	
BKG052	301,706.4	9,700,430.6	32.2	81.0	Yes	
BKG053	301,870.5	9,699,956.3	49.3	79.5	Yes	
BKG054	301,923.7	9,699,988.7	59.3	79.5	Yes	
BKG055	301,821.9	9,699,927.3	44.1	79.0	Yes	
BKG056	302,185.0	9,700,140.2	53.8	79.5	No	No LAS
BKG057	301,918.6	9,699,449.7	43.5	64.0	Yes	
BKG057C	301,917.8	9,699,450.4	43.2	39.5	No	No LAS
BKG058	301,966.5	9,699,455.8	46.6	67.0	Yes	
BKG059	302,288.8	9,699,493.0	58.6	60.0	No	No LAS

SALVA
Mining Consultants

Batukucing Drillhole Collars						
Drill Hole No.	Easting	Northing	Elevation	Total depth	Model Flag	Reasons
BKG060	302,021.3	9,699,463.3	45.6	60.0	Yes	
BKG061C	301,984.4	9,698,958.9	59.9	80.0	Yes	
BKG062	302,076.6	9,698,968.1	55.2	81.0	Yes	
BKG063C	302,163.4	9,698,973.5	46.7	81.0	Yes	
BKG064	302,258.5	9,698,989.8	38.1	125.3	Yes	
BKG065	301,841.0	9,698,437.7	50.9	79.5	Yes	
BKG066	301,749.5	9,698,426.5	60.2	79.5	Yes	
BKG066C	301,824.3	9,698,434.6	51.9	46.5	No	survey error - too far from BKG066
BKG067	302,035.8	9,698,459.6	48.1	81.0	Yes	
BKG068	302,276.7	9,698,486.7	42.8	79.5	Yes	
BKG069	301,920.6	9,697,941.6	41.1	60.0	Yes	
BKG070	301,708.2	9,697,916.3	58.3	73.5	Yes	
BKG071	301,818.7	9,697,928.9	56.8	66.7	Yes	
DH03	300,380.6	9,703,163.5	39.7	67.5	Yes	
DH04	300,639.8	9,702,709.9	39.9	75.0	No	No LAS
DH05	300,704.2	9,702,750.6	40.3	83.0	No	No LAS
DH06	300,925.2	9,702,299.4	49.5	66.0	No	No LAS
DH07	300,950.3	9,702,309.8	48.0	90.0	No	No LAS
DH09C	301,223.7	9,701,892.4	43.5	74.0	No	No LAS
DH10	301,435.0	9,701,438.4	47.1	77.0	No	No LAS
DH12	301,831.1	9,700,510.1	52.8	72.0	No	No LAS
DH13	301,868.5	9,700,531.0	47.2	90.0	No	No LAS
DH14	301,598.5	9,700,951.8	38.1	70.0	No	No LAS
DH17	301,835.3	9,699,440.0	42.8	69.0	No	No LAS
DH18	301,988.0	9,699,457.3	42.8	81.0	No	No LAS
DH19	301,834.4	9,698,940.8	51.6	84.5	No	No LAS
DH20	301,686.1	9,698,925.3	55.1	52.0	No	No LAS
DH21	301,630.5	9,698,413.9	51.1	34.5	No	No LAS
DH24	300,467.8	9,702,897.0	32.5	45.0	No	No LAS
DH25	300,516.9	9,702,926.1	45.8	78.0	No	No LAS
DH26	300,797.3	9,702,525.6	35.1	75.0	No	No LAS
DH26A	301,768.7	9,700,764.5	40.8	81.0	No	No LAS
DH27	301,767.8	9,700,765.7	40.9	81.0	No	No LAS
DH28	301,094.2	9,702,092.5	42.4	76.5	No	No LAS
DH28A	301,037.1	9,702,074.8	44.6	46.5	No	No LAS
DH29	301,110.4	9,702,113.8	37.9	75.0	No	No LAS
DH30	301,366.2	9,701,688.0	52.9	49.5	No	No LAS
DH30A	301,328.2	9,701,665.3	48.5	42.0	No	No LAS
DH31	301,366.2	9,701,688.0	52.9	84.0	No	No LAS

SALVA
Mining Consultants

Batukucing Drillhole Collars						
Drill Hole No.	Easting	Northing	Elevation	Total depth	Model Flag	Reasons
DH32	301,534.0	9,701,199.3	41.4	52.5	No	No LAS
DH32A	301,463.8	9,701,158.5	35.0	72.8	No	No LAS
DH32B	301,501.6	9,701,180.2	42.4	51.0	No	No LAS
DH33	301,547.0	9,701,207.8	31.6	78.0	No	No LAS
DH34	301,733.2	9,700,742.1	39.6	74.0	No	No LAS
DH34A	301,699.6	9,700,721.6	46.6	60.0	No	No LAS
DH35	301,769.0	9,700,764.0	40.9	75.0	No	No LAS
DH35C	301,768.7	9,700,764.5	40.8	81.0	No	No LAS
DH36	301,812.3	9,700,211.1	50.7	80.0	No	No LAS
DH36A	301,782.4	9,700,192.8	46.3	70.5	No	No LAS
DH37	301,827.7	9,700,219.3	51.4	60.0	No	No LAS
DH37A	301,843.8	9,700,228.1	50.6	80.0	No	No LAS
DH38	301,922.4	9,699,707.6	48.1	48.0	No	No LAS
DH39	301,953.1	9,699,721.2	41.5	60.0	No	No LAS
DH3A	300,450.6	9,703,179.6	46.4	72.0	No	No LAS
DH40	302,000.1	9,699,733.0	36.9	65.0	No	No LAS
DH42	301,837.6	9,699,198.7	49.2	52.5	No	No LAS
DH42A	301,769.3	9,699,190.9	50.7	86.0	No	No LAS
DH43	301,932.2	9,699,207.7	42.1	66.0	No	No LAS
DH44	302,011.0	9,699,217.6	53.6	75.5	No	No LAS
DH46	301,717.3	9,698,674.3	43.5	46.5	No	No LAS
DH47	301,882.7	9,698,641.6	57.0	76.0	No	No LAS
DH48	301,859.5	9,698,718.7	54.6	74.0	No	No LAS
DHA35C	301,767.8	9,700,765.7	40.9	81.0	No	No LAS

Belani Drillhole Collars						
DHNo	Easting	Northing	RL	Total depth	Model Flag	Reasons
B004	301,509.4	9,710,303.3	51.0	21.0	No	No Lithology
B004B	301,519.3	9,710,325.4	48.3	24.4	No	No Lithology
B005	301,760.2	9,710,401.6	45.3	90.0	No	No Lithology
B005B	301,747.8	9,710,400.3	46.5	111.0	No	No Lithology
B006	301,568.6	9,710,170.6	32.6	76.0	No	No Lithology
B007	301,752.2	9,710,229.9	56.0	105.0	No	No Lithology
B009	301,820.2	9,710,069.9	41.5	121.0	No	No Lithology
B010	301,652.8	9,709,871.2	46.1	78.5	No	No Lithology
B012	301,721.2	9,709,728.0	41.8	116.5	No	No Lithology
BL01	300,644.5	9,713,368.7	34.5	125.0	Yes	
BL02	300,487.5	9,713,246.6	34.5	100.0	Yes	
BL03	300,217.8	9,713,069.7	48.6	81.0	Yes	

SALVA
Mining Consultants

Belani Drillhole Collars						
DHNo	Easting	Northing	RL	Total depth	Model Flag	Reasons
BL04	300,292.5	9,713,129.6	46.4	81.0	Yes	
BL09	301,046.8	9,713,059.4	42.2	81.0	Yes	
BL10	300,688.6	9,712,769.1	46.7	81.0	Yes	
BL11	300,423.6	9,712,561.6	34.4	81.0	Yes	
BL11A	300,479.4	9,712,608.6	34.7	60.0	Yes	
BL11B	300,433.9	9,712,616.1	35.1	46.5	Yes	
BL11D	300,459.8	9,712,655.2	35.6	46.5	Yes	
BL12	301,102.9	9,712,459.5	54.0	85.0	Yes	
BL12C	301,095.6	9,712,470.0	56.4	81.0	Yes	
BL13	301,143.3	9,712,496.9	52.2	81.0	Yes	
BL14	301,222.0	9,712,551.0	60.9	81.0	Yes	
BL14A	300,975.3	9,712,622.2	44.4	63.0	No	No Lithology
BL14B	301,250.9	9,712,572.4	57.2	46.5	Yes	
BL14C	301,221.5	9,712,552.3	60.8	35.8	Yes	
BL15	301,528.6	9,712,791.5	53.3	81.0	Yes	
BL15C	301,534.7	9,712,800.2	52.7	26.0	Yes	
BL16	301,665.3	9,712,870.0	57.5	58.5	Yes	
BL18	302,068.1	9,712,580.3	58.3	81.0	Yes	
BL19	301,926.9	9,712,467.5	55.1	81.0	Yes	
BL20	301,797.1	9,712,366.8	42.5	81.0	Yes	
BL20A	301,836.2	9,712,395.8	49.9	81.0	Yes	
BL20B	301,606.1	9,712,216.4	44.9	82.5	Yes	
BL20DUM	301,797.1	9,712,366.8	42.5	220.0	No	Seam correlation issue
BL21	301,422.1	9,712,108.4	34.5	81.0	Yes	
BL21A	301,491.6	9,712,125.7	47.8	81.0	Yes	
BL21AR	301,492.3	9,712,124.9	47.7	76.0	No	No Lithology
BL21B	301,556.3	9,712,181.2	44.7	81.0	Yes	
BL22	301,398.4	9,712,079.6	36.6	81.0	Yes	
BL22A	301,464.8	9,712,106.6	38.6	58.5	Yes	
BL23	301,821.8	9,711,741.5	32.2	52.5	Yes	
BL23A	301,859.9	9,711,740.7	34.4	40.5	Yes	
BL24	301,707.8	9,711,663.0	29.7	81.0	Yes	
BL24A	301,789.8	9,711,725.6	33.7	51.0	Yes	
BL24AC	301,789.7	9,711,728.3	33.8	36.4	Yes	
BL25	301,663.1	9,711,626.5	30.5	81.0	Yes	
BL25C	301,661.9	9,711,628.3	30.7	81.0	Yes	
BL26	302,078.6	9,711,951.9	41.9	81.0	Yes	
BL26C	302,078.2	9,711,953.0	41.9	39.2	Yes	
BL27	302,111.4	9,711,974.4	45.3	81.0	Yes	
BL28	302,151.6	9,712,007.8	53.0	81.0	Yes	
BL29	302,243.8	9,711,445.4	47.9	81.0	Yes	

SALVA
Mining Consultants

Belani Drillhole Collars						
DHNo	Easting	Northing	RL	Total depth	Model Flag	Reasons
BL30	302,120.0	9,711,348.0	46.0	81.0	Yes	
BL30A	302,242.8	9,711,445.6	47.9	81.0	No	No Lithology
BL31	301,726.2	9,711,040.5	34.8	81.0	Yes	
BL31A	301,855.6	9,711,142.0	61.4	81.0	Yes	
BL31B	301,914.0	9,711,187.4	50.2	81.0	Yes	
BL32	301,707.9	9,711,024.9	34.2	81.0	Yes	
BL33	301,494.2	9,710,233.6	47.1	81.0	Yes	
BL34	301,553.4	9,710,275.5	43.6	81.0	Yes	
BL34C	301,552.0	9,710,276.1	43.8	81.0	Yes	
BL35	301,712.7	9,710,400.8	43.1	100.0	Yes	
BL36	301,730.6	9,710,414.7	42.9	51.0	Yes	
BL36A	301,825.6	9,710,487.8	39.6	42.0	Yes	
BL36AC	301,825.4	9,710,486.5	39.5	10.9	Yes	
BL36B	301,858.8	9,710,511.3	43.0	37.5	Yes	
BL36C	301,730.8	9,710,413.2	43.0	20.7	Yes	
BL37	302,035.3	9,710,648.6	33.2	61.0	Yes	
BL37A	302,130.5	9,710,719.9	45.4	69.0	Yes	
BL38	302,218.1	9,710,782.0	51.0	300.0	Yes	
BL38A	301,958.2	9,711,223.7	50.6	52.5	Yes	
BL38C	302,217.3	9,710,781.5	50.9	45.0	Yes	
BL39	301,673.6	9,710,684.6	38.0	45.0	Yes	
BL40	301,752.1	9,710,703.8	37.0	69.0	Yes	
BL41	300,975.3	9,712,622.2	44.4	49.5	No	No Lithology
BL43	301,423.4	9,710,045.2	42.9	81.0	No	No Lithology
BS05	301,679.6	9,709,787.5	28.0	33.0	No	No Lithology
BS05	301,679.6	9,709,787.5	23.1	33.0	No	No Lithology
CKBL1	300,670.0	9,712,602.0	43.8	45.0	Yes	Calculated RL
CKBL3	301,835.0	9,711,520.0	33.0	108.0	Yes	
CKBL4	302,244.0	9,711,033.0	48.0	76.5	Yes	
CKBL5	301,680.0	9,712,600.0		75.0	No	Incorrect correlation
CKBL-6	301,890.0	9,710,800.0	39.6	101.0	Yes	
GTB001	301,595.3	9,710,196.5	42.8	69.9	Yes	
OC15	301,730.6	9,710,414.7	42.9	1.0	No	No Lithology
OC24	300,997.0	9,712,584.0	40.1	1.0	No	No Lithology
OC-8	300,997.0	9,712,584.0	41.9	15.0	No	No Lithology
RGT202203	301,143.6	9,712,417.6	46.1	8.0	YES	Dummy holes for outcrop data
TP06	302,185.0	9,710,091.0	30.4	8.0	YES	Dummy holes for outcrop data
RGT410	301,486.9	9,711,473.2	32.7	5.0	NO	Correlation issues
RGT412	301,669.9	9,711,608.9	29.8	5.0	YES	Dummy holes for outcrop data
RGT430	301,671.3	9,710,636.7	39.7	5.0	YES	Dummy holes for outcrop data
RGTE600	301,671.4	9,710,575.3	39.4	5.0	YES	Dummy holes for outcrop data

SALVA
Mining Consultants

Belani Drillhole Collars						
DHNo	Easting	Northing	RL	Total depth	Model Flag	Reasons
B005	301,760.2	9,710,401.6	43.6	90.0	YES	
B006	301,568.6	9,710,170.6	35.7	76.0	YES	
B007	301,752.2	9,710,229.9	53.3	105.0	YES	
B009	301,820.2	9,710,069.9	41.9	121.0	YES	

SALVA
Mining Consultants

Appendix D: QA/AC Review - Coal Quality

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0003AT	32.25	32.75	0.50	B0003AT_01	I_840	Yes	Good sample
B0003AT	32.75	33.65	0.90	B0003AT_02	I_850	Yes	Good sample
B0003AT	33.90	34.70	0.80	B0003AT_03	I_860	Yes	Good sample
B0003AT	34.70	37.60	2.90	B0003AT_04	I_870	Yes	Good sample
B0003AT	39.75	40.50	0.75	B0003AT_05	I_940	Yes	Good sample
B0003AT	40.50	44.90	4.40	B0003AT_06	I_950	Yes	Good sample
B0003AT	55.00	56.10	1.10	B0003AT_07	I_960	Yes	Good sample
B0003AT	56.60	59.05	2.45	B0003AT_08	I_970	Yes	Good sample
B0003BT	9.70	11.00	1.30	B0003BT_01	I_350	Yes	Good sample
B0003BT	28.75	29.65	0.90	B0003BT_02	I_450	Yes	Good sample
B0003BT	35.65	37.00	1.35	B0003BT_03	I_550	Yes	Good sample
B0003BT	37.25	37.70	0.45	B0003BT_04	I_560	Yes	Good sample
B0003BT	47.60	48.25	0.65	B0003BT_05	I_660	Yes	Good sample
B0003BT	62.75	63.15	0.40	B0003BT_06	I_750	Yes	Good sample
B0003BT	85.00	85.75	0.75	B0003BT_07	I_840	Yes	Good sample
B0003BT	85.75	86.75	1.00	B0003BT_08	I_850	Yes	Good sample
B0003BT	87.00	87.80	0.80	B0003BT_09	I_860	Yes	Good sample
B0003BT	87.80	90.80	3.00	B0003BT_10	I_870	Yes	Good sample
B0003BT	93.05	93.80	0.75	B0003BT_11	I_940	Yes	Good sample
B0003BT	93.80	98.20	4.40	B0003BT_12	I_950	Yes	Good sample
B0005T	21.25	23.00	1.75	B0005T_01	I_1050	Yes	Good sample
B0006T	25.30	26.00	0.70	B0006T_01	I_840	Yes	Good sample
B0006T	26.10	27.20	1.10	B0006T_02	I_850	Yes	Good sample
B0006T	27.55	28.40	0.85	B0006T_03	I_860	Yes	Good sample
B0006T	28.40	31.00	2.60	B0006T_04	I_870	Yes	Good sample
B0006T	35.35	36.10	0.75	B0006T_05	I_940	Yes	Good sample
B0006T	36.10	40.65	4.55	B0006T_06	I_950	Yes	Good sample
B0006T	50.90	54.15	3.25	B0006T_07	I_970	Yes	Good sample
B0006T	76.55	78.00	1.45	B0006T_08	I_1050	Yes	Good sample
B0007T	9.55	10.60	1.05	B0007T_01	I_650	Yes	Good sample
B0007T	55.05	55.85	0.80	B0007T_02	I_840	Yes	Good sample
B0007T	55.85	57.10	1.25	B0007T_03	I_850	Yes	Good sample
B0007T	57.35	58.20	0.85	B0007T_04	I_860	Yes	Good sample
B0007T	58.65	60.75	2.10	B0007T_05	I_870	Yes	Good sample
B0007T	64.40	65.15	0.75	B0007T_06	I_940	Yes	Good sample
B0007T	65.15	69.55	4.40	B0007T_07	I_950	Yes	Good sample
B0007T	79.85	80.60	0.75	B0007T_08	I_960	Yes	Good sample
B0007T	81.10	83.95	2.85	B0007T_09	I_970	Yes	Good sample
B0008T	24.75	26.50	1.75	B0008T_01	I_1050	Yes	Good sample
B0009T	38.50	39.30	0.80	B0009T_01	I_840	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0009T	39.45	40.55	1.10	B0009T_02	I_850	Yes	Good sample
B0009T	41.10	42.10	1.00	B0009T_03	I_860	Yes	Good sample
B0009T	42.10	44.90	2.80	B0009T_04	I_870	Yes	Good sample
B0009T	51.20	51.95	0.75	B0009T_05	I_940	Yes	Good sample
B0009T	52.35	56.60	4.25	B0009T_06	I_950	Yes	Good sample
B0010T	6.60	7.65	1.05	B0010T_01	I_350	Yes	Good sample
B0010T	9.60	11.20	1.60	B0010T_02	I_360	Yes	Good sample
B0010T	31.80	32.65	0.85	B0010T_03	I_550	Yes	Good sample
B0010T	34.15	34.40	0.25	B0010T_04	I_560	Yes	Good sample
B0010T	41.10	42.20	1.10	B0010T_05	I_650	Yes	Good sample
B0010T	43.50	43.95	0.45	B0010T_06	I_660	Yes	Good sample
B0011T	10.40	10.90	0.50	B0011T_01	I_940	Yes	Good sample
B0011T	10.90	15.70	4.80	B0011T_02	I_950	Yes	Good sample
B0011T	20.25	21.60	1.35	B0011T_03	I_960	Yes	Good sample
B0011T	22.25	24.70	2.45	B0011T_04	I_970	Yes	Good sample
B0011T	48.55	50.60	2.05	B0011T_05	I_1050	Yes	Good sample
B0012T	37.05	37.80	0.75	B0012T_01	I_840	Yes	Good sample
B0012T	37.80	39.50	1.70	B0012T_02	I_850	Yes	Good sample
B0012T	40.45	41.50	1.05	B0012T_03	I_860	Yes	Good sample
B0012T	41.95	44.75	2.80	B0012T_04	I_870	Yes	Good sample
B0012T	52.15	52.65	0.50	B0012T_05	I_940	Yes	Good sample
B0012T	52.65	57.60	4.95	B0012T_06	I_950	Yes	Good sample
B0013T	33.55	34.85	1.30	B0013T_01	I_350	Yes	Good sample
B0013T	36.50	38.30	1.80	B0013T_02	I_360	Yes	Good sample
B0013T	49.70	50.65	0.95	B0013T_03	I_450	Yes	Good sample
B0013T	57.00	57.90	0.90	B0013T_04	I_550	Yes	Good sample
B0013T	60.55	60.95	0.40	B0013T_05	I_560	Yes	Good sample
B0013T	68.00	69.40	1.40	B0013T_06	I_650	Yes	Good sample
B0014AT	10.90	11.40	0.50	B0014AT_01	I_940	Yes	Good sample
B0014AT	11.40	15.95	4.55	B0014AT_02	I_950	Yes	Good sample
B0014AT	17.20	18.40	1.20	B0014AT_03	I_960	Yes	Good sample
B0014AT	18.40	22.05	3.65	B0014AT_04	I_970	Yes	Good sample
B0014AT	40.65	42.75	2.10	B0014AT_05	I_1050	Yes	Good sample
B0015T	16.35	17.05	0.70	B0015T_01	I_840	Yes	Good sample
B0015T	17.05	19.05	2.00	B0015T_02	I_850	Yes	Good sample
B0015T	20.45	21.45	1.00	B0015T_03	I_860	Yes	Good sample
B0015T	21.45	24.95	3.50	B0015T_04	I_870	Yes	Good sample
B0015T	44.55	44.80	0.25	B0015T_05	I_940	Yes	Good sample
B0015T	45.25	49.20	3.95	B0015T_06	I_950	Yes	Good sample
B0015T	52.00	53.10	1.10	B0015T_07	I_960	Yes	Good sample
B0015T	53.65	56.45	2.80	B0015T_08	I_970	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0016T	35.90	37.05	1.15	B0016T_01	I_650	Yes	Good sample
B0016T	72.65	73.35	0.70	B0016T_02	I_840	Yes	Good sample
B0016T	73.35	75.00	1.65	B0016T_03	I_850	Yes	Good sample
B0016T	78.30	79.30	1.00	B0016T_04	I_860	Yes	Good sample
B0016T	79.30	82.80	3.50	B0016T_05	I_870	Yes	Good sample
B0017T	40.60	42.50	1.90	B0017T_01	I_360	Yes	Good sample
B0017T	55.90	56.85	0.95	B0017T_02	I_450	Yes	Good sample
B0019T	21.85	22.50	0.65	B0019T_01	I_940	Yes	Good sample
B0019T	22.50	27.00	4.50	B0019T_02	I_950	Yes	Good sample
B0019T	27.95	29.25	1.30	B0019T_03	I_960	Yes	Good sample
B0019T	29.25	32.30	3.05	B0019T_04	I_970	Yes	Good sample
B0019T	47.70	49.65	1.95	B0019T_05	I_1050	Yes	Good sample
B0020T	35.60	36.30	0.70	B0020T_01	I_840	Yes	Good sample
B0020T	36.65	38.25	1.60	B0020T_02	I_850	Yes	Good sample
B0020T	40.70	41.20	0.50	B0020T_03	I_860	Yes	Good sample
B0020T	41.20	45.30	4.10	B0020T_04	I_870	Yes	Good sample
B0020T	65.10	65.75	0.65	B0020T_05	I_940	Yes	Good sample
B0020T	66.20	70.20	4.00	B0020T_06	I_950	Yes	Good sample
B0020T	71.95	73.25	1.30	B0020T_07	I_960	Yes	Good sample
B0020T	73.70	76.80	3.10	B0020T_08	I_970	Yes	Good sample
B0021T	27.25	28.15	0.90	B0021T_01	I_350	Yes	Good sample
B0021T	29.05	30.90	1.85	B0021T_02	I_360	Yes	Good sample
B0022T	18.70	19.10	0.40	B0022T_01	I_940	Yes	Good sample
B0022T	19.10	23.30	4.20	B0022T_02	I_950	Yes	Good sample
B0022T	24.15	25.50	1.35	B0022T_03	I_960	Yes	Good sample
B0022T	25.50	28.55	3.05	B0022T_04	I_970	Yes	Good sample
B0022T	44.90	46.65	1.75	B0022T_05	I_1050	Yes	Good sample
B0023T	21.75	23.15	1.40	B0023T_01	I_850	Yes	Good sample
B0023T	25.90	26.40	0.50	B0023T_02	I_860	Yes	Good sample
B0023T	26.80	29.75	2.95	B0023T_03	I_870	Yes	Good sample
B0023T	52.50	52.85	0.35	B0023T_04	I_940	Yes	Good sample
B0023T	53.45	57.45	4.00	B0023T_05	I_950	Yes	Good sample
B0023T	57.90	59.25	1.35	B0023T_06	I_960	Yes	Good sample
B0023T	59.70	62.55	2.85	B0023T_07	I_970	Yes	Good sample
B0024T	26.65	27.90	1.25	B0024T_01	I_650	Yes	Good sample
B0024T	55.50	56.10	0.60	B0024T_02	I_840	Yes	Good sample
B0024T	56.45	57.55	1.10	B0024T_03	I_850	Yes	Good sample
B0024T	59.50	60.00	0.50	B0024T_04	I_860	Yes	Good sample
B0024T	60.00	63.00	3.00	B0024T_05	I_870	Yes	Good sample
B0025T	18.50	19.80	1.30	B0025T_01	I_350	Yes	Good sample
B0025T	20.15	22.05	1.90	B0025T_02	I_360	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0026T	12.60	13.10	0.50	B0026T_01	I_940	Yes	Good sample
B0026T	13.55	18.00	4.45	B0026T_02	I_950	Yes	Good sample
B0026T	18.55	19.85	1.30	B0026T_03	I_960	Yes	Good sample
B0026T	19.85	23.20	3.35	B0026T_04	I_970	Yes	Good sample
B0026T	41.60	44.05	2.45	B0026T_05	I_1050	Yes	Good sample
B0027T	18.35	18.95	0.60	B0027T_01	I_840	Yes	Good sample
B0027T	19.55	21.45	1.90	B0027T_02	I_850	Yes	Good sample
B0027T	25.55	26.35	0.80	B0027T_03	I_860	Yes	Good sample
B0027T	26.80	29.20	2.40	B0027T_04	I_870	Yes	Good sample
B0027T	51.55	52.05	0.50	B0027T_05	I_940	Yes	Good sample
B0027T	52.05	56.20	4.15	B0027T_06	I_950	Yes	Good sample
B0027T	57.05	58.35	1.30	B0027T_07	I_960	Yes	Good sample
B0027T	58.35	61.75	3.40	B0027T_08	I_970	Yes	Good sample
B0028AT	6.30	7.80	1.50	B0028AT_01	I_350	Yes	Good sample
B0028AT	8.40	10.30	1.90	B0028AT_02	I_360	Yes	Good sample
B0028AT	52.05	53.30	1.25	B0028AT_03	I_650	Yes	Good sample
B0028T	16.85	17.90	1.05	B0028T_01	I_550	Yes	Good sample
B0028T	35.65	36.85	1.20	B0028T_02	I_650	Yes	Good sample
B0028T	71.20	72.30	1.10	B0028T_03	I_860	Yes	Good sample
B0028T	72.80	74.90	2.10	B0028T_04	I_870	Yes	Good sample
B0029AT	12.35	14.65	2.30	B0029AT_01	I_1050	Yes	Good sample
B0029T	12.05	14.20	2.15	B0029T_01	I_1050	Yes	Good sample
B0030T	13.05	13.50	0.45	B0030T_01	I_940	Yes	Good sample
B0030T	13.50	18.00	4.50	B0030T_02	I_950	Yes	Good sample
B0030T	19.45	20.75	1.30	B0030T_03	I_960	Yes	Good sample
B0030T	20.75	24.00	3.25	B0030T_04	I_970	Yes	Good sample
B0030T	43.55	45.85	2.30	B0030T_05	I_1050	Yes	Good sample
B0031T	10.10	10.90	0.80	B0031T_01	I_550	Yes	Good sample
B0031T	23.85	24.90	1.05	B0031T_02	I_650	Yes	Good sample
B0031T	39.95	40.30	0.35	B0031T_03	I_750	Yes	Good sample
B0032T	23.85	25.00	1.15	B0032T_01	I_350	Yes	Good sample
B0032T	25.30	27.40	2.10	B0032T_02	I_360	Yes	Good sample
B0034T	18.05	20.30	2.25	B0034T_01	I_1050	Yes	Good sample
B0035T	6.55	7.75	1.20	B0035T_01	I_650	Yes	Good sample
B0035T	33.05	33.85	0.80	B0035T_02	I_840	Yes	Good sample
B0035T	52.60	52.90	0.30	B0035T_03	I_860	Yes	Good sample
B0035T	53.75	56.30	2.55	B0035T_04	I_870	Yes	Good sample
B0036T	3.75	6.10	2.35	B0036T_01	I_360	Yes	Good sample
B0036T	18.30	18.65	0.35	B0036T_02	I_450	Yes	Good sample
B0036T	30.15	31.35	1.20	B0036T_03	I_550	Yes	Good sample
B0036T	42.80	44.20	1.40	B0036T_04	I_650	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0036T	68.90	69.75	0.85	B0036T_05	I_840	Yes	Good sample
B0042G	20.55	20.95	0.40	B0042G_01	I_750	Yes	Good sample
B0042G	40.15	40.85	0.70	B0042G_02	I_840	Yes	Good sample
B0042G	40.85	41.95	1.10	B0042G_03	I_850	Yes	Good sample
B0042G	41.95	42.65	0.70	B0042G_04	I_860	Yes	Good sample
B0042G	42.65	45.95	3.30	B0042G_05	I_870	Yes	Good sample
B0042G	49.30	53.95	4.65	B0042G_06	I_950	Yes	Good sample
B0042G	63.75	65.00	1.25	B0042G_07	I_960	Yes	Good sample
B0042G	65.00	68.35	3.35	B0042G_08	I_970	Yes	Good sample
B0052G	3.70	4.80	1.10	B0052G_01	I_850	Yes	Good sample
B0052G	7.25	9.75	2.50	B0052G_02	I_870	Yes	Good sample
B0052G	22.20	23.10	0.90	B0052G_03	I_940	Yes	Good sample
B0052G	23.10	27.40	4.30	B0052G_04	I_950	Yes	Good sample
B0052G	29.70	31.00	1.30	B0052G_05	I_960	Yes	Good sample
B0052G	31.00	34.45	3.45	B0052G_06	I_970	Yes	Good sample
B0053G	16.40	16.70	0.30	B0053G_01	I_750	Yes	Good sample
B0053G	34.80	35.65	0.85	B0053G_02	I_840	Yes	Good sample
B0053G	35.70	37.20	1.50	B0053G_03	I_850	Yes	Good sample
B0053G	38.00	39.00	1.00	B0053G_04	I_860	Yes	Good sample
B0053G	39.00	42.25	3.25	B0053G_05	I_870	Yes	Good sample
B0053G	52.10	53.00	0.90	B0053G_06	I_940	Yes	Good sample
B0053G	53.00	57.50	4.50	B0053G_07	I_950	Yes	Good sample
B0053G	61.45	62.50	1.05	B0053G_08	I_960	Yes	Good sample
B0053G	62.90	65.75	2.85	B0053G_09	I_970	Yes	Good sample
B0069G	14.55	14.90	0.35	B0069G_01	I_830	Yes	Good sample
B0069G	16.80	17.60	0.80	B0069G_02	I_840	Yes	Good sample
B0069G	18.85	20.10	1.25	B0069G_03	I_850	Yes	Good sample
B0069G	29.80	30.80	1.00	B0069G_04	I_860	Yes	Good sample
B0069G	31.15	33.55	2.40	B0069G_05	I_870	Yes	Good sample
B0069G	57.40	61.90	4.50	B0069G_06	I_950	Yes	Good sample
B0069G	63.20	63.70	0.50	B0069G_07	I_960	Yes	Good sample
B0069G	63.70	67.85	4.15	B0069G_08	I_970	Yes	Good sample
B0069G	87.50	90.10	2.60	B0069G_09	I_1050	Yes	Good sample
B0083AT	26.95	29.55	2.60	B0083AT_01	I_1050	Yes	Good sample
B0084AT	5.90	7.40	1.50	B0084AT_01	I_350	Yes	Good sample
B0084AT	7.40	9.40	2.00	B0084AT_02	I_360	Yes	Good sample
B0084AT	22.40	23.50	1.10	B0084AT_03	I_450	Yes	Good sample
B0084AT	33.75	34.80	1.05	B0084AT_04	I_550	Yes	Good sample
B0084AT	37.55	37.95	0.40	B0084AT_05	I_560	Yes	Good sample
B0084AT	45.05	46.20	1.15	B0084AT_06	I_650	Yes	Good sample
B0084AT	66.65	67.10	0.45	B0084AT_07	I_750	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0084AT	74.40	75.40	1.00	B0084AT_08	I_840	Yes	Good sample
B0087AT	21.80	23.30	1.50	B0087AT_01	I_350	Yes	Good sample
B0087AT	23.30	25.60	2.30	B0087AT_02	I_360	Yes	Good sample
B0087AT	50.70	51.70	1.00	B0087AT_03	I_550	Yes	Good sample
B0087AT	54.70	55.05	0.35	B0087AT_04	I_560	Yes	Good sample
B0087AT	64.85	66.15	1.30	B0087AT_05	I_650	Yes	Good sample
B0090T	78.20	78.80	0.60	B0090T_01	I_860	Yes	Good sample
B0090T	79.20	81.00	1.80	B0090T_02	I_870	Yes	Good sample
B0091T	16.15	18.15	2.00	B0091T_01	I_870	Yes	Good sample
B0091T	36.60	37.45	0.85	B0091T_02	I_950	Yes	Good sample
B0091T	57.95	58.95	1.00	B0091T_03	I_970	Yes	Good sample
B0092AT	4.90	6.00	1.10	B0092AT_01	I_350	Yes	Good sample
B0092AT	19.65	20.50	0.85	B0092AT_02	I_450	Yes	Good sample
B0092AT	29.00	29.70	0.70	B0092AT_03	I_550	Yes	Good sample
B0092AT	32.20	32.55	0.35	B0092AT_04	I_560	Yes	Good sample
B0093T	40.65	42.50	1.85	B0093T_01	I_360	Yes	Good sample
B0098T	88.75	91.05	2.30	B0098T_01	I_1050	Yes	Good sample
B0099T	12.50	13.20	0.70	B0099T_01	I_450	Yes	Good sample
B0099T	22.10	22.70	0.60	B0099T_02	I_550	Yes	Good sample
B0100T	24.75	26.50	1.75	B0100T_01	I_360	Yes	Good sample
B0100T	37.55	38.20	0.65	B0100T_02	I_450	Yes	Good sample
B0100T	50.20	50.55	0.35	B0100T_03	I_560	Yes	Good sample
B0102AT	59.50	60.15	0.65	B0102AT_01	I_940	Yes	Good sample
B0102AT	60.60	64.05	3.45	B0102AT_02	I_950	Yes	Good sample
B0104AT	7.10	8.95	1.85	B0104AT_01	I_1050	Yes	Good sample
B0104T	30.45	31.20	0.75	B0104T_01	I_940	Yes	Good sample
B0104T	31.20	36.60	5.40	B0104T_02	I_950	Yes	Good sample
B0104T	77.05	79.55	2.50	B0104T_03	I_1050	Yes	Good sample
B0105AT	9.60	11.60	2.00	B0105AT_01	I_360	Yes	Good sample
B0105AT	30.00	30.95	0.95	B0105AT_02	I_550	Yes	Good sample
B0105T	89.20	90.00	0.80	B0105T_01	I_940	Yes	Good sample
B0105T	90.00	95.50	5.50	B0105T_02	I_950	Yes	Good sample
B0106AT	18.70	24.25	5.55	B0106AT_01	I_950	Yes	Good sample
B0106AT	29.00	30.75	1.75	B0106AT_02	I_970	Yes	Good sample
B0107T	63.90	64.70	0.80	B0107T_01	I_860	Yes	Good sample
B0107T	64.70	66.85	2.15	B0107T_02	I_870	Yes	Good sample
B0108T	6.00	7.00	1.00	B0108T_01	I_350	Yes	Good sample
B0108T	7.00	9.15	2.15	B0108T_02	I_360	Yes	Good sample
B0108T	19.55	20.50	0.95	B0108T_03	I_450	Yes	Good sample
B0108T	26.65	27.60	0.95	B0108T_04	I_550	Yes	Good sample
B0108T	30.90	31.25	0.35	B0108T_05	I_560	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0108T	66.70	67.20	0.50	B0108T_06	I_830	Yes	Good sample
B0111T	65.35	66.65	1.30	B0111T_01	I_870	Yes	Good sample
B0112T	19.00	24.00	5.00	B0112T_01	I_950	Yes	Good sample
B0112T	24.00	25.00	1.00	B0112T_02	I_960	Yes	Good sample
B0112T	25.00	27.90	2.90	B0112T_03	I_970	Yes	Good sample
B0112T	51.10	53.70	2.60	B0112T_04	I_1050	Yes	Good sample
B0113T	62.25	66.00	3.75	B0113T_01	I_950	Yes	Good sample
B0113T	67.00	68.95	1.95	B0113T_02	I_970	Yes	Good sample
B0114AT	32.35	33.20	0.85	B0114AT_01	I_350	Yes	Good sample
B0114AT	33.20	35.00	1.80	B0114AT_02	I_360	Yes	Good sample
B0114AT	48.15	48.75	0.60	B0114AT_03	I_450	Yes	Good sample
B0114AT	53.60	54.45	0.85	B0114AT_04	I_550	Yes	Good sample
B0114T	7.45	8.15	0.70	B0114T_01	I_450	Yes	Good sample
B0114T	12.05	13.00	0.95	B0114T_02	I_550	Yes	Good sample
B0117AT	62.95	63.75	0.80	B0117AT_01	I_860	Yes	Good sample
B0117AT	63.75	65.90	2.15	B0117AT_02	I_870	Yes	Good sample
B0117AT	86.30	86.90	0.60	B0117AT_03	I_940	Yes	Good sample
B0117AT	87.35	91.70	4.35	B0117AT_04	I_950	Yes	Good sample
B0117AT	91.70	93.70	2.00	B0117AT_05	I_960	Yes	Good sample
B0117AT	93.70	95.70	2.00	B0117AT_06	I_970	Yes	Good sample
B0117BT	19.20	20.15	0.95	B0117BT_01	I_350	Yes	Good sample
B0117BT	20.15	21.15	1.00	B0117BT_02	I_360	Yes	Good sample
B0117BT	32.45	33.35	0.90	B0117BT_03	I_450	Yes	Good sample
B0117BT	37.45	38.50	1.05	B0117BT_04	I_550	Yes	Good sample
B0117T	52.30	52.55	0.25	B0117T_01	I_940	Yes	Good sample
B0117T	53.50	57.50	4.00	B0117T_02	I_950	Yes	Good sample
B0117T	57.50	59.50	2.00	B0117T_03	I_960	Yes	Good sample
B0117T	59.50	62.05	2.55	B0117T_04	I_970	Yes	Good sample
B0117T	85.40	87.00	1.60	B0117T_05	I_1050	Yes	Good sample
B0120AT	64.05	64.85	0.80	B0120AT_01	I_860	Yes	Good sample
B0120AT	64.85	67.35	2.50	B0120AT_02	I_870	Yes	Good sample
B0120AT	73.15	74.45	1.30	B0120AT_03	I_940	Yes	Good sample
B0120AT	74.45	79.15	4.70	B0120AT_04	I_950	Yes	Good sample
B0120AT	79.15	81.15	2.00	B0120AT_05	I_960	Yes	Good sample
B0120AT	81.15	82.60	1.45	B0120AT_06	I_970	Yes	Good sample
B0120BT	30.30	31.25	0.95	B0120BT_01	I_550	Yes	Good sample
B0120BT	43.15	43.45	0.30	B0120BT_02	I_650	Yes	Good sample
B0120BT	70.60	71.00	0.40	B0120BT_03	I_840	Yes	Good sample
B0120CT	64.90	65.75	0.85	B0120CT_01	I_450	Yes	Good sample
B0120CT	71.65	72.75	1.10	B0120CT_02	I_550	Yes	Good sample
B0120CT	88.15	88.80	0.65	B0120CT_03	I_650	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0120T	9.60	10.40	0.80	B0120T_01	I_860	Yes	Good sample
B0120T	10.40	12.65	2.25	B0120T_02	I_870	Yes	Good sample
B0120T	17.65	18.95	1.30	B0120T_03	I_940	Yes	Good sample
B0120T	19.35	22.80	3.45	B0120T_04	I_950	Yes	Good sample
B0120T	22.80	24.80	2.00	B0120T_05	I_960	Yes	Good sample
B0120T	24.80	26.80	2.00	B0120T_06	I_970	Yes	Good sample
B0120T	45.60	47.55	1.95	B0120T_07	I_1050	Yes	Good sample
B0122T	16.60	17.40	0.80	B0122T_01	I_860	Yes	Good sample
B0122T	17.40	20.35	2.95	B0122T_02	I_870	Yes	Good sample
B0122T	22.50	27.70	5.20	B0122T_03	I_950	Yes	Good sample
B0122T	27.70	28.30	0.60	B0122T_04	I_960	Yes	Good sample
B0122T	28.30	31.10	2.80	B0122T_05	I_970	Yes	Good sample
B0122T	48.90	51.25	2.35	B0122T_06	I_1050	Yes	Good sample
B0123G	14.20	14.80	0.60	B0123G_01	I_750	Yes	Good sample
B0123G	69.30	70.30	1.00	B0123G_02	I_860	Yes	Good sample
B0123G	70.50	73.55	3.05	B0123G_03	I_870	Yes	Good sample
B0123G	74.40	75.50	1.10	B0123G_04	I_940	Yes	Good sample
B0123G	75.50	80.40	4.90	B0123G_05	I_950	Yes	Good sample
B0123G	80.40	82.40	2.00	B0123G_06	I_960	Yes	Good sample
B0123G	82.40	84.10	1.70	B0123G_07	I_970	Yes	Good sample
B0123T	44.70	45.50	0.80	B0123T_01	I_860	Yes	Good sample
B0123T	45.50	48.30	2.80	B0123T_02	I_870	Yes	Good sample
B0123T	49.25	50.35	1.10	B0123T_03	I_940	Yes	Good sample
B0123T	50.35	55.25	4.90	B0123T_04	I_950	Yes	Good sample
B0123T	55.25	57.25	2.00	B0123T_05	I_960	Yes	Good sample
B0123T	57.25	58.55	1.30	B0123T_06	I_970	Yes	Good sample
B0124T	10.70	12.70	2.00	B0124T_01	I_960	Yes	Good sample
B0124T	12.70	14.70	2.00	B0124T_02	I_970	Yes	Good sample
B0124T	30.95	32.80	1.85	B0124T_03	I_1050	Yes	Good sample
B0125AT	18.30	18.75	0.45	B0125AT_01	I_650	Yes	Good sample
B0125AT	71.85	73.95	2.10	B0125AT_02	I_870	Yes	Good sample
B0125AT	75.50	79.00	3.50	B0125AT_03	I_950	Yes	Good sample
B0125AT	79.00	81.00	2.00	B0125AT_04	I_960	Yes	Good sample
B0125AT	81.00	83.25	2.25	B0125AT_05	I_970	Yes	Good sample
B0125T	13.20	15.95	2.75	B0125T_01	I_870	Yes	Good sample
B0125T	17.90	19.00	1.10	B0125T_02	I_950	Yes	Good sample
B0125T	35.05	36.95	1.90	B0125T_03	I_1050	Yes	Good sample
B0126G	25.45	28.15	2.70	B0126G_01	I_870	Yes	Good sample
B0126G	28.45	29.55	1.10	B0126G_02	I_940	Yes	Good sample
B0126G	29.55	33.65	4.10	B0126G_03	I_950	Yes	Good sample
B0126G	33.65	35.15	1.50	B0126G_04	I_960	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0126G	54.75	56.70	1.95	B0126G_05	I_1050	Yes	Good sample
B0126T	34.40	36.65	2.25	B0126T_01	I_870	Yes	Good sample
B0126T	38.20	41.90	3.70	B0126T_02	I_950	Yes	Good sample
B0126T	41.90	43.40	1.50	B0126T_03	I_960	Yes	Good sample
B0126T	43.40	44.55	1.15	B0126T_04	I_970	Yes	Good sample
B0127AT	39.05	40.45	1.40	B0127AT_01	I_870	Yes	Good sample
B0127AT	41.15	42.25	1.10	B0127AT_02	I_940	Yes	Good sample
B0127AT	42.25	45.15	2.90	B0127AT_03	I_950	Yes	Good sample
B0127AT	45.15	47.15	2.00	B0127AT_04	I_960	Yes	Good sample
B0127AT	47.15	48.35	1.20	B0127AT_05	I_970	Yes	Good sample
B0127AT	65.40	67.40	2.00	B0127AT_06	I_1050	Yes	Good sample
B0127BT	49.65	52.05	2.40	B0127BT_01	I_870	Yes	Good sample
B0127BT	52.85	54.00	1.15	B0127BT_02	I_940	Yes	Good sample
B0127BT	54.00	56.95	2.95	B0127BT_03	I_950	Yes	Good sample
B0127BT	56.95	58.95	2.00	B0127BT_04	I_960	Yes	Good sample
B0127BT	58.95	60.95	2.00	B0127BT_05	I_970	Yes	Good sample
B0127T	36.80	38.80	2.00	B0127T_01	I_870	Yes	Good sample
B0127T	40.75	43.85	3.10	B0127T_02	I_950	Yes	Good sample
B0127T	43.85	45.85	2.00	B0127T_03	I_960	Yes	Good sample
B0127T	45.85	47.85	2.00	B0127T_04	I_970	Yes	Good sample
B0127T	64.85	66.50	1.65	B0127T_05	I_1050	Yes	Good sample
B0128AT	28.65	29.45	0.80	B0128AT_01	I_860	Yes	Good sample
B0128AT	29.45	31.45	2.00	B0128AT_02	I_870	Yes	Good sample
B0128AT	32.35	33.45	1.10	B0128AT_03	I_940	Yes	Good sample
B0128AT	33.45	37.85	4.40	B0128AT_04	I_950	Yes	Good sample
B0128AT	59.45	61.05	1.60	B0128AT_05	I_1050	Yes	Good sample
B0128T	12.40	12.90	0.50	B0128T_01	I_750	Yes	Good sample
B0128T	32.15	32.60	0.45	B0128T_02	I_830	Yes	Good sample
B0128T	59.80	60.60	0.80	B0128T_03	I_860	Yes	Good sample
B0128T	60.60	62.30	1.70	B0128T_04	I_870	Yes	Good sample
B0128T	63.10	64.20	1.10	B0128T_05	I_940	Yes	Good sample
B0128T	64.20	67.10	2.90	B0128T_06	I_950	Yes	Good sample
B0128T	67.10	69.10	2.00	B0128T_07	I_960	Yes	Good sample
B0128T	69.10	71.25	2.15	B0128T_08	I_970	Yes	Good sample
B0129T	12.10	13.05	0.95	B0129T_01	I_650	Yes	Good sample
B0129T	73.05	73.30	0.25	B0129T_02	I_870	Yes	Good sample
B0130T	12.50	15.65	3.15	B0130T_01	I_750	Yes	Good sample
B0130T	34.10	35.10	1.00	B0130T_02	I_830	Yes	Good sample
B0131T	56.40	58.95	2.55	B0131T_01	I_750	Yes	Good sample
B0132AT	43.10	44.15	1.05	B0132AT_01	I_350	Yes	Good sample
B0132AT	44.15	45.65	1.50	B0132AT_02	I_350	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0132T	10.80	12.05	1.25	B0132T_01	I_350	Yes	Good sample
B0144AT	27.80	29.10	1.30	B0144AT_01	I_350	Yes	Good sample
B0144AT	32.90	34.65	1.75	B0144AT_02	I_360	Yes	Good sample
B0144AT	41.80	43.20	1.40	B0144AT_03	I_550	Yes	Good sample
B0144AT	43.40	44.15	0.75	B0144AT_04	I_560	Yes	Good sample
B0144AT	50.25	50.85	0.60	B0144AT_05	I_650	Yes	Good sample
B0144AT	51.45	52.10	0.65	B0144AT_06	I_660	Yes	Good sample
B0144AT	72.35	72.75	0.40	B0144AT_07	I_830	Yes	Good sample
B0144AT	74.40	75.15	0.75	B0144AT_08	I_840	Yes	Good sample
B0144AT	75.15	76.40	1.25	B0144AT_09	I_850	Yes	Good sample
B0144AT	76.40	77.25	0.85	B0144AT_10	I_860	Yes	Good sample
B0144AT	77.40	79.15	1.75	B0144AT_11	I_870	Yes	Good sample
B0144AT	79.95	80.85	0.90	B0144AT_12	I_940	Yes	Good sample
B0144AT	81.35	85.10	3.75	B0144AT_13	I_950	Yes	Good sample
B0144T	5.45	6.65	1.20	B0144T_01	I_450	Yes	Good sample
B0144T	7.40	9.20	1.80	B0144T_02	I_550	Yes	Good sample
B0144T	9.20	9.80	0.60	B0144T_03	I_560	Yes	Good sample
B0144T	15.80	16.35	0.55	B0144T_04	I_660	Yes	Good sample
B0144T	28.05	28.75	0.70	B0144T_05	I_750	Yes	Good sample
B0144T	41.40	41.65	0.25	B0144T_06	I_830	Yes	Good sample
B0144T	43.05	43.55	0.50	B0144T_07	I_840	Yes	Good sample
B0144T	43.55	45.05	1.50	B0144T_08	I_850	Yes	Good sample
B0144T	45.05	45.55	0.50	B0144T_09	I_860	Yes	Good sample
B0144T	45.55	48.05	2.50	B0144T_10	I_870	Yes	Good sample
B0144T	48.75	49.50	0.75	B0144T_11	I_940	Yes	Good sample
B0144T	49.50	54.65	5.15	B0144T_12	I_950	Yes	Good sample
B0144T	66.30	66.90	0.60	B0144T_13	I_960	Yes	Good sample
B0144T	67.40	70.60	3.20	B0144T_14	I_970	Yes	Good sample
B0145AT	8.55	9.45	0.90	B0145AT_01	I_650	Yes	Good sample
B0145AT	9.95	10.40	0.45	B0145AT_02	I_660	Yes	Good sample
B0145AT	20.25	20.70	0.45	B0145AT_03	I_750	Yes	Good sample
B0145AT	43.40	44.20	0.80	B0145AT_04	I_860	Yes	Good sample
B0145AT	44.20	46.40	2.20	B0145AT_05	I_870	Yes	Good sample
B0145AT	47.80	48.55	0.75	B0145AT_06	I_940	Yes	Good sample
B0145AT	48.55	52.95	4.40	B0145AT_07	I_950	Yes	Good sample
B0145AT	66.40	69.10	2.70	B0145AT_08	I_970	Yes	Good sample
B0145BT	23.30	23.90	0.60	B0145BT_01	I_350	Yes	Good sample
B0145BT	27.50	29.50	2.00	B0145BT_02	I_360	Yes	Good sample
B0145BT	49.60	50.85	1.25	B0145BT_03	I_550	Yes	Good sample
B0145BT	51.25	51.80	0.55	B0145BT_04	I_560	Yes	Good sample
B0145CT	17.60	18.60	1.00	B0145CT_01	I_850	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0145CT	19.20	20.00	0.80	B0145CT_02	I_860	Yes	Good sample
B0145CT	20.00	21.70	1.70	B0145CT_03	I_870	Yes	Good sample
B0145CT	22.70	23.45	0.75	B0145CT_04	I_940	Yes	Good sample
B0145CT	23.45	27.95	4.50	B0145CT_05	I_950	Yes	Good sample
B0145CT	38.25	39.15	0.90	B0145CT_06	I_960	Yes	Good sample
B0145CT	39.65	42.40	2.75	B0145CT_07	I_970	Yes	Good sample
B0145T	33.65	35.00	1.35	B0145T_01	I_350	Yes	Good sample
B0145T	39.25	41.15	1.90	B0145T_02	I_360	Yes	Good sample
B0145T	62.90	64.25	1.35	B0145T_03	I_450	Yes	Good sample
B0145T	64.70	65.80	1.10	B0145T_04	I_550	Yes	Good sample
B0145T	65.80	66.25	0.45	B0145T_05	I_560	Yes	Good sample
B0145T	73.05	73.35	0.30	B0145T_06	I_650	Yes	Good sample
B0146AT	19.25	20.75	1.50	B0146AT_01	I_350	Yes	Good sample
B0146AT	23.70	25.50	1.80	B0146AT_02	I_360	Yes	Good sample
B0146AT	41.90	42.75	0.85	B0146AT_03	I_450	Yes	Good sample
B0146AT	43.70	45.30	1.60	B0146AT_04	I_550	Yes	Good sample
B0146AT	45.30	45.90	0.60	B0146AT_05	I_560	Yes	Good sample
B0146BT	15.05	15.90	0.85	B0146BT_01	I_450	Yes	Good sample
B0146BT	17.40	18.90	1.50	B0146BT_02	I_550	Yes	Good sample
B0146BT	18.90	19.45	0.55	B0146BT_03	I_560	Yes	Good sample
B0146BT	27.05	27.70	0.65	B0146BT_04	I_650	Yes	Good sample
B0146BT	28.30	28.75	0.45	B0146BT_05	I_660	Yes	Good sample
B0146BT	38.30	39.20	0.90	B0146BT_06	I_750	Yes	Good sample
B0146BT	60.55	61.30	0.75	B0146BT_07	I_840	Yes	Good sample
B0146BT	61.30	62.55	1.25	B0146BT_08	I_850	Yes	Good sample
B0146BT	62.55	63.35	0.80	B0146BT_09	I_860	Yes	Good sample
B0146BT	63.35	65.75	2.40	B0146BT_10	I_870	Yes	Good sample
B0146BT	66.80	67.55	0.75	B0146BT_11	I_940	Yes	Good sample
B0146BT	67.55	72.50	4.95	B0146BT_12	I_950	Yes	Good sample
B0146BT	83.80	85.10	1.30	B0146BT_13	I_960	Yes	Good sample
B0146BT	85.50	88.40	2.90	B0146BT_14	I_970	Yes	Good sample
B0146CT	4.10	4.60	0.50	B0146CT_01	I_750	Yes	Good sample
B0146CT	25.80	26.55	0.75	B0146CT_02	I_840	Yes	Good sample
B0146CT	26.55	27.80	1.25	B0146CT_03	I_850	Yes	Good sample
B0146CT	27.80	28.60	0.80	B0146CT_04	I_860	Yes	Good sample
B0146CT	28.60	30.50	1.90	B0146CT_05	I_870	Yes	Good sample
B0146CT	31.75	32.50	0.75	B0146CT_06	I_940	Yes	Good sample
B0146CT	32.65	37.30	4.65	B0146CT_07	I_950	Yes	Good sample
B0146CT	45.50	46.60	1.10	B0146CT_08	I_960	Yes	Good sample
B0146CT	47.20	49.60	2.40	B0146CT_09	I_970	Yes	Good sample
B0146CT	67.80	69.30	1.50	B0146CT_10	I_1050	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0147AT	6.30	7.05	0.75	B0147AT_01	I_450	Yes	Good sample
B0147AT	9.70	11.20	1.50	B0147AT_02	I_550	Yes	Good sample
B0147AT	11.20	11.80	0.60	B0147AT_03	I_560	Yes	Good sample
B0147AT	19.55	20.45	0.90	B0147AT_04	I_650	Yes	Good sample
B0147AT	20.95	21.25	0.30	B0147AT_05	I_660	Yes	Good sample
B0147AT	30.95	31.50	0.55	B0147AT_06	I_750	Yes	Good sample
B0147AT	54.40	55.15	0.75	B0147AT_07	I_840	Yes	Good sample
B0147AT	55.15	56.40	1.25	B0147AT_08	I_850	Yes	Good sample
B0147AT	56.40	57.20	0.80	B0147AT_09	I_860	Yes	Good sample
B0147AT	57.20	59.25	2.05	B0147AT_10	I_870	Yes	Good sample
B0147AT	60.55	61.30	0.75	B0147AT_11	I_940	Yes	Good sample
B0147AT	61.30	65.70	4.40	B0147AT_12	I_950	Yes	Good sample
B0147AT	76.35	77.55	1.20	B0147AT_13	I_960	Yes	Good sample
B0147AT	77.90	81.10	3.20	B0147AT_14	I_970	Yes	Good sample
B0147BT	22.20	24.40	2.20	B0147BT_01	I_1050	Yes	Good sample
B0147T	20.55	22.05	1.50	B0147T_01	I_850	Yes	Good sample
B0147T	22.05	22.70	0.65	B0147T_02	I_860	Yes	Good sample
B0147T	22.70	24.85	2.15	B0147T_03	I_870	Yes	Good sample
B0147T	26.65	27.40	0.75	B0147T_04	I_940	Yes	Good sample
B0147T	27.40	32.40	5.00	B0147T_05	I_950	Yes	Good sample
B0147T	38.65	39.90	1.25	B0147T_06	I_960	Yes	Good sample
B0147T	40.30	43.35	3.05	B0147T_07	I_970	Yes	Good sample
B0147T	63.65	65.95	2.30	B0147T_08	I_1050	Yes	Good sample
B0149AT	25.35	25.70	0.35	B0149AT_01	I_830	Yes	Good sample
B0149AT	27.45	28.20	0.75	B0149AT_02	I_840	Yes	Good sample
B0149AT	28.20	29.45	1.25	B0149AT_03	I_850	Yes	Good sample
B0149AT	29.45	30.25	0.80	B0149AT_04	I_860	Yes	Good sample
B0149AT	30.25	32.70	2.45	B0149AT_05	I_870	Yes	Good sample
B0149AT	34.50	35.25	0.75	B0149AT_06	I_940	Yes	Good sample
B0149AT	35.25	40.00	4.75	B0149AT_07	I_950	Yes	Good sample
B0149AT	47.65	48.35	0.70	B0149AT_08	I_960	Yes	Good sample
B0149AT	48.80	51.70	2.90	B0149AT_09	I_970	Yes	Good sample
B0149AT	71.95	73.65	1.70	B0149AT_10	I_1050	Yes	Good sample
B0149BT	36.60	38.20	1.60	B0149BT_01	I_350	Yes	Good sample
B0149BT	41.05	42.80	1.75	B0149BT_02	I_360	Yes	Good sample
B0149BT	60.00	61.50	1.50	B0149BT_03	I_550	Yes	Good sample
B0149BT	61.50	62.00	0.50	B0149BT_04	I_560	Yes	Good sample
B0149BT	71.15	72.25	1.10	B0149BT_05	I_650	Yes	Good sample
B0149T	19.70	20.75	1.05	B0149T_01	I_450	Yes	Good sample
B0149T	25.15	26.30	1.15	B0149T_02	I_550	Yes	Good sample
B0149T	26.30	26.80	0.50	B0149T_03	I_560	Yes	Good sample

SALVA
Mining Consultants

ML Block							
Drill Hole	Top	Base	Thickness	Sample No	Seam	Modelled	QA/QC
B0149T	35.85	36.80	0.95	B0149T_04	I_650	Yes	Good sample
B0149T	70.90	71.90	1.00	B0149T_05	I_840	Yes	Good sample
B0149T	71.90	73.10	1.20	B0149T_06	I_850	Yes	Good sample
B0149T	73.90	75.80	1.90	B0149T_07	I_870	Yes	Good sample
B0149T	78.15	83.00	4.85	B0149T_08	I_950	Yes	Good sample

Batukucing block drill hole collars						
Drill Hole	FROM	TO	THICK	SAMPLE No	MODELLED	QA/QC
BB02	23.78	25.08	1.3	QP001	No	Duplicate of BB09 B500
BB02	26.84	29.44	2.6	QP002	No	Duplicate of BB09 B600
BB02	42.44	44.5	2.06	QP003	No	Duplicate of BB09 B700
BB05	6.36	7.12	0.76	QP004	No	Duplicate of BKG035 B410
BB05	50.13	51.63	1.5	QP005	No	Duplicate of BB09 B500
BB05	53.07	55.42	2.35	QP006	No	Duplicate of BB09 B600
BB05	68.69	70.94	2.25	QP007	No	Duplicate of BB09 B700
BB06	8.37	9.55	1.18	QP008	No	Duplicate of BB09 B500
BB06	11.56	13.99	2.43	QP009	No	Duplicate of BB09 B600
BB06	25.38	27.6	2.22	QP010	No	Duplicate of BB09 B700
BB06C	14.8	15.8	1	QP011	Yes	
BB06C	17.9	20.2	2.3	QP012	Yes	
BB06C	31.8	34	2.2	QP013	Yes	
BB07	10.9	13.7	2.8	QP014	No	Duplicate of BB09 B700
BB08	16	16.95	0.95	QP015	No	Duplicate of BB09 B500
BB08	20.4	22.8	2.4	QP016	No	Duplicate of BB09 B600
BB08	36.8	39.2	2.4	QP017	No	Duplicate of BB09 B700
BB09	60.3	60.9	0.6	QP018	Yes	
BB09	63.7	65.8	2.1	QP019	Yes	
BB09	79.6	82.1	2.5	QP020	Yes	
BB10	64.9	65.4	0.5	QP021	No	B1000 Default Values
BB11	64.94	65.74	0.8	QP022	No	Not used in Structure Model
BB12	15.02	16.78	1.76	QP023	No	Duplicate of BB09 B500
BB12	22.96	25.58	2.62	QP024	No	Duplicate of BB09 B600
BB12	32.56	35.08	2.52	QP025	No	Duplicate of BB09 B700
BB13	8.86	11.72	2.86	QP026	No	Duplicate of BB09 B700
BB14	39.8	40.3	0.5	QP027	No	B1000 Default Values
BB15	11.82	15.2	3.38	QP028	No	Duplicate of BB09 B700
BB15	77.6	78.3	0.7	QP029	No	B1000 Default Values
BB16	20.98	21.74	0.76	QP030	No	Duplicate of BB09 B500

SALVA
Mining Consultants

Batukucing block drill hole collars						
Drill Hole	FROM	TO	THICK	SAMPLE No	MODELLED	QA/QC
BB16	25.66	28.63	2.97	QP031	No	Duplicate of BB09 B600
BB16	35.91	38.57	2.66	QP032	No	Duplicate of BB09 B700
BB16C	25.6	28.8	3.2	QP033	Yes	
BB16C	35.8	38.7	2.9	QP034	Yes	
BB17	5.17	8.79	3.62	QP035	No	B200 Duplicate
BB17	51.6	52.3	0.7	QP036	No	Duplicate of BKG035 B420
BB18	54.4	55.4	1	QP037	No	Duplicate of BB09 B500
BB20	64.6	65.59	0.99	QP038	No	Duplicate of BB09 B500
BB20	70.8	73.39	2.59	QP039	No	Duplicate of BB09 B600
BB21	5.09	8.21	3.12	QP040	No	Duplicate of BB09 B700
BKG017	16.4	17.8	1.4	QP041	No	B1000 Default Values
BKG018	56.2	57.59	1.39	QP042	No	B1000 Default Values
BKG019	12.8	14.95	2.15	QP043	No	Duplicate of BKG035 B410
BKG019	43.9	44.79	0.89	QP044	No	Duplicate of BB09 B500
BKG019	48.6	52.2	3.6	QP045	No	Duplicate of BB09 B600
BKG019	60.68	64.12	3.44	QP046	No	Duplicate of BB09 B700
BKG020	36.2	38.8	2.6	QP047	No	Not used in Structure Model
BKG021	5.7	7.4	1.7	QP048	No	Duplicate of BKG039C B810
BKG021	7.4	10.19	2.79	QP049	No	Duplicate of BKG039C B810
BKG021	40.8	42.44	1.64	QP050	No	Duplicate of BKG038 B920
BKG021	42.44	45.76	3.32	QP051	No	Duplicate of BKG038C B910
BKG021	68	69.17	1.17	QP052	No	B1000 Default Values
BKG021C	5.75	7.45	1.7	QP053	Yes	
BKG021C	7.45	9.55	2.1	QP054	Yes	
BKG021C	40.39	42.4	2.01	QP055	Yes	
BKG021C	42.4	45.07	2.67	QP056	Yes	
BKG022	5.3	5.7	0.4	QP057	No	Duplicate of BB09 B500
BKG022	10.08	12.9	2.82	QP058	No	Duplicate of BB09 B600
BKG022	25.82	29.22	3.4	QP059	No	Duplicate of BB09 B700
BKG022	76.1	77.2	1.1	QP060	No	Duplicate of BKG038 B920
BKG022	77.4	80.8	3.4	QP061	No	Duplicate of BKG038C B910
BKG022C	5.15	6.55	1.4	QP062	Yes	
BKG022C	9.9	12.9	3	QP063	Yes	
BKG022C	26.04	29.8	3.76	QP064	Yes	
BKG023	78.62	79.59	0.97	QP065	No	Duplicate of BB09 B500
BKG023	83.39	85.8	2.41	QP066	No	Duplicate of BB09 B600
BKG024	30.1	34.6	4.5	QP067	No	B200 Duplicate
BKG024	78.7	79.4	0.7	QP068	No	Duplicate of BKG035 B420
BKG025	28.8	30.1	1.3	QP069	No	B1000 Default Values
BKG026	35.2	38.25	3.05	QP070	No	Duplicate of BKG035 B420
BKG026	38.6	41.2	2.6	QP071	No	Duplicate of BKG035 B410

SALVA
Mining Consultants

Batukucing block drill hole collars						
Drill Hole	FROM	TO	THICK	SAMPLE No	MODELLED	QA/QC
BKG026	60.8	62	1.2	QP072	No	Duplicate of BB09 B500
BKG026	66.1	68.8	2.7	QP073	No	Duplicate of BB09 B600
BKG029	19.32	19.92	0.6	QP074	No	Duplicate of BKG038 B920
BKG029	20.27	24.38	4.11	QP075	No	Duplicate of BKG038C B910
BKG029	49.1	51.2	2.1	QP076	No	B1000 Default Values
BKG029C	19.32	19.92	0.6	QP077	Yes	
BKG029C	20.27	24.38	4.11	QP078	Yes	
BKG030	22.4	23.6	1.2	QP079	No	Duplicate of BB09 B500
BKG030	28.1	31	2.9	QP080	No	Duplicate of BB09 B600
BKG030	36.5	41.3	4.8	QP081	No	Duplicate of BB09 B700
BKG030	53.6	54.5	0.9	QP082	No	Duplicate of BKG039C B810
BKG030	55	57.9	2.9	QP083	No	Duplicate of BKG039C B810
BKG030C	22.4	23.6	1.2	QP084	Yes	
BKG030C	28.1	31	2.9	QP085	Yes	
BKG030C	37.7	41.3	3.6	QP086	Yes	
BKG030C	53.6	54.65	1.05	QP087	Yes	
BKG030C	54.9	57.85	2.95	QP088	Yes	
BKG032	15.6	16.7	1.1	QP089	No	B200 Duplicate
BKG032	53.9	54.4	0.5	QP090	No	Duplicate of BKG035 B420
BKG033	19	20.6	1.6	QP091	No	B1000 Default Values
BKG034	5.7	8.7	3	QP092	No	Duplicate of BB09 B700
BKG034	23.1	24.6	1.5	QP093	No	Duplicate of BKG039C B810
BKG034	25.05	28.6	3.55	QP094	No	Duplicate of BKG039C B810
BKG035	24.2	25.35	1.15	QP095	Yes	
BKG035	32.2	33.5	1.3	QP096	Yes	
BKG035	52.8	54.2	1.4	QP097	No	Not used in Structure Model
BKG035	58.3	60.9	2.6	QP098	No	Not used in Structure Model
BKG035	71.8	75	3.2	QP099	No	Not used in Structure Model
BKG038	4.8	6.8	2	QP100	No	Duplicate of BKG035 B420
BKG038	18.8	23.3	4.5	QP101	No	Duplicate of BKG035 B410
BKG038	36.8	38.1	1.3	QP102	No	Duplicate of BB09 B500
BKG038	41.5	44.5	3	QP103	No	Duplicate of BB09 B600
BKG038	74.2	74.6	0.4	QP104	Yes	
BKG038	75	78.6	3.6	QP105	No	Duplicate of BKG038C B910
BKG038C	4	7.9	3.9	QP106	No	Duplicate of BKG035 B420
BKG038C	19.2	23.5	4.3	QP107	No	Duplicate of BKG035 B410
BKG038C	37	38.9	1.9	QP108	No	Duplicate of BB09 B500
BKG038C	41.5	44.65	3.15	QP109	No	Duplicate of BB09 B600
BKG038C	75.1	79.25	4.15	QP110	Yes	
BKG039	22.38	23.74	1.36	QP111	No	Not used in Structure Model
BKG039	35.3	36.6	1.3	QP112	No	Duplicate of BKG035 B410

SALVA
Mining Consultants

Batukucing block drill hole collars						
Drill Hole	FROM	TO	THICK	SAMPLE No	MODELLED	QA/QC
BKG039	56.9	58.1	1.2	QP113	No	Not used in Structure Model
BKG039	62.9	65.2	2.3	QP114	No	Duplicate of BB09 B600
BKG039	75.1	78.5	3.4	QP115	No	Not used in Structure Model
BKG039C	17.55	19.2	1.65	QP116	No	Duplicate of BKG035 B410
BKG039C	28.5	29.6	1.1	QP117	No	Duplicate of BKG035 B410
BKG039C	46.85	48.9	2.05	QP118	No	Duplicate of BB09 B500
BKG039C	51.85	55.1	3.25	QP119	No	Duplicate of BB09 B600
BKG039C	62.8	66	3.2	QP120	No	Duplicate of BB09 B700
BKG039C	77	80	3	QP121	Yes	
BKG039C	80.85	81.9	1.05	QP122	Yes	
BKG040	43.9	44.6	0.7	QP123	No	Duplicate of BKG035 B420
BKG040	74.4	74.9	0.5	QP124	No	Duplicate of BB09 B500
BKG041A	7.8	10.7	2.9	QP125	No	Duplicate of BB09 B600
BKG041A	19.4	23.2	3.8	QP126	No	Duplicate of BB09 B700
BKG045	23.8	25.3	1.5	QP127	No	Duplicate of BKG039C B810
BKG045	60	61.3	1.3	QP128	No	Duplicate of BKG038 B920
BKG045	61.5	65.35	3.85	QP129	No	Duplicate of BKG038C B910
BKG046	45.4	46	0.6	QP130	No	Duplicate of BKG035 B420
BKG046	58.1	59.9	1.8	QP131	No	Duplicate of BKG035 B420
BKG046	64.1	65.4	1.3	QP132	No	Duplicate of BKG035 B410
BKG047	23.95	26.55	2.6	QP133	No	Duplicate of BB09 B600
BKG047	35.4	39.45	4.05	QP134	No	Duplicate of BB09 B700
BKG048	25.3	29.75	4.45	QP135	No	B200 Duplicate
BKG049	12.6	13.1	0.5	QP136	No	Duplicate of BKG035 B410
BKG049	35.4	36.4	1	QP137	Yes	
BKG049	50.8	52.22	1.42	QP138	Yes	
BKG051	31.95	35.3	3.35	QP139	No	B200 Duplicate
BKG052	16.8	19.75	2.95	QP140	No	B1000 Default Values
BKG053	6.7	7.8	1.1	QP141	No	Duplicate of BB09 B700
BKG053	19.6	21	1.4	QP142	No	Duplicate of BKG039C B810
BKG053	21.4	23.15	1.75	QP143	No	Duplicate of BKG039C B810
BKG053	32	32.5	0.5	QP144	No	Duplicate of BKG038 B920
BKG053	33	34.6	1.6	QP145	No	Duplicate of BKG038C B910
BKG053	62.8	64.6	1.8	QP146	No	B1000 Default Values
BKG054	23.5	25.8	2.3	QP147	No	Duplicate of BKG035 B420
BKG055	20.8	23.2	2.4	QP148	No	B1000 Default Values
BKG058	18.4	19.2	0.8	QP149	No	Duplicate of BB09 B700
BKG060	23.3	25.8	2.5	QP150	No	Duplicate of BKG035 B420
BKG060	30.5	31.4	0.9	QP151	No	Duplicate of BKG035 B410
BKG060	54.7	55.3	0.6	QP152	No	Duplicate of BB09 B700
BKG061C	32.8	36.1	3.3	QP153	Yes	

SALVA
Mining Consultants

Batukucing block drill hole collars						
Drill Hole	FROM	TO	THICK	SAMPLE No	MODELLED	QA/QC
BKG062	68.2	71.3	3.1	QP154	No	Duplicate of BKG035 B420
BKG062	75	75.8	0.8	QP155	No	Duplicate of BKG035 B410
BKG064	48.6	50	1.4	QP156	No	B200 Duplicate
BKG067	43.9	47	3.1	QP157	No	Duplicate of BKG035 B420
BKG067	53.8	54.8	1	QP158	No	Duplicate of BKG035 B410
BKG067	75.6	76.3	0.7	QP159	No	Duplicate of BB09 B700
BKG068	50.8	54.8	4	QP160	No	B420 Duplicate
BKG069	11.6	15.2	3.6	QP161	No	Duplicate of BKG035 B420
BKG069	17.8	19	1.2	QP162	No	Duplicate of BKG035 B410
BKG069	41.7	42.4	0.7	QP163	No	Duplicate of BB09 B700
BKG070	2.7	3.7	1	QP164	No	Duplicate of BB09 B700
BKG071	26.5	27.35	0.85	QP165	No	Duplicate of BB09 B700
DH03	20.6	21.6	1	QP166	No	Duplicate of BKG039C B600
DH03	26.7	29.4	2.7	QP167	No	Duplicate of BB09 B600
DH03	39.8	43.7	3.9	QP168	No	Duplicate of BB09 B700
DH03	54.5	55.42	0.92	QP169	No	Duplicate of BKG039C B810
DH03	55.82	59	3.18	QP170	No	Duplicate of BKG039C B810

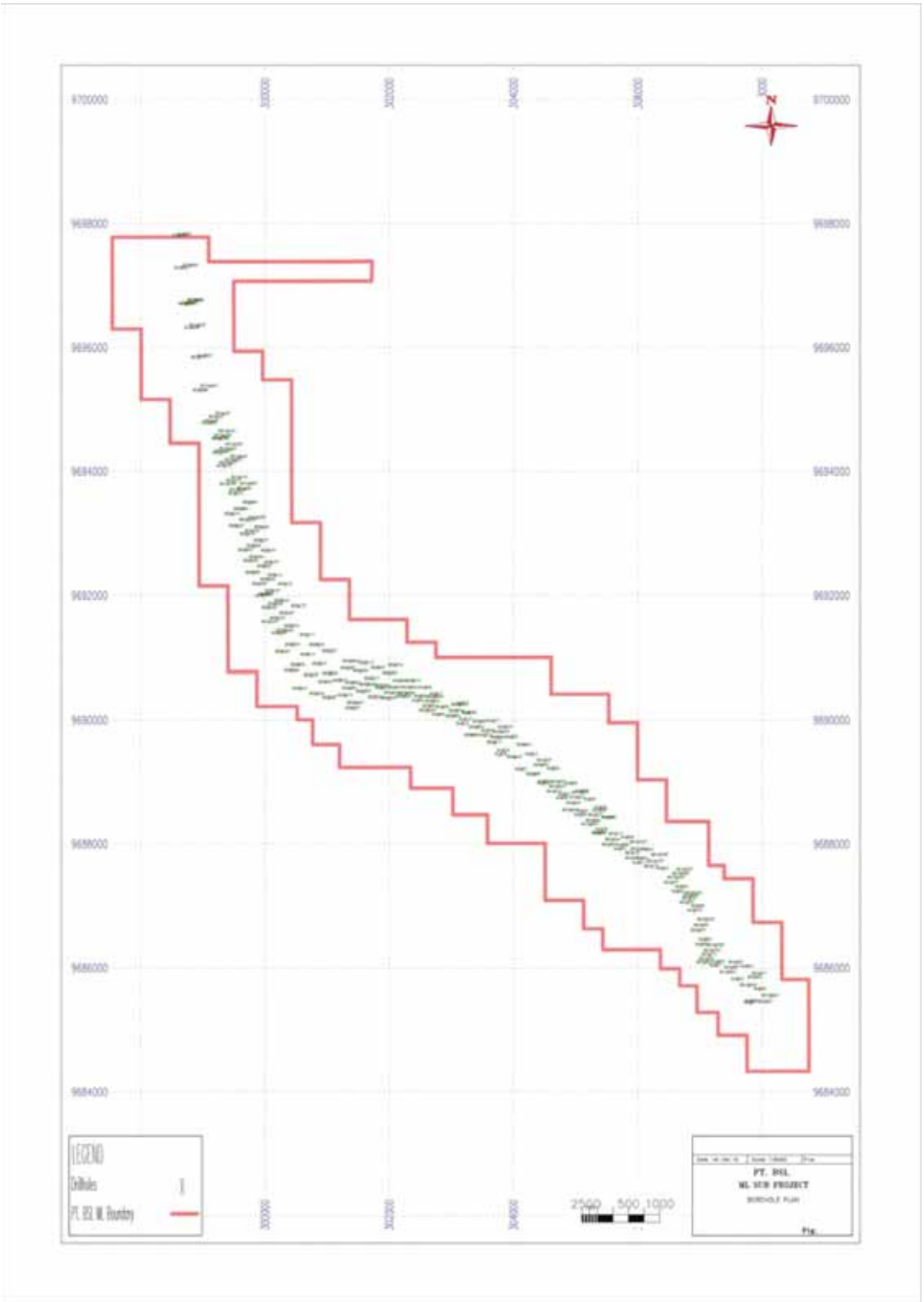
Belani BL						
HOLE No	FROM	TO	THICK	SAMPLE No	MODELLED	QA/QC
CKBL1	3.70	4.30	0.60	CKBL1_001	YES	
CKBL1	5.20	8.00	2.80	CKBL1_002	YES	
CKBL1	64.65	65.90	1.25	CKBL1_003	YES	
CKBL1	66.05	66.70	0.65	CKBL1_004	YES	
CKBL1	66.70	68.20	1.50	CKBL1_005	YES	
CKBL1	68.20	69.70	1.50	CKBL1_006	YES	
CKBL1	69.70	71.20	1.50	CKBL1_007	YES	
CKBL1	74.20	75.70	1.50	CKBL1_008	YES	
CKBL1	75.70	77.50	1.80	CKBL1_009	YES	
CKBL3	16.60	18.10	1.50	CKBL3_010	YES	
CKBL3	20.80	23.90	3.10	CKBL3_011	YES	
CKBL3	94.80	97.30	2.50	CKBL3_012	YES	
CKBL3	97.30	108.00	10.70	CKBL3_013	YES	
CKBL4	6.00	9.92	3.92	CKBL4_014	YES	
CKBL4	9.92	12.00	2.08	CKBL4_015	YES	
CKBL4	12.00	12.64	0.64	CKBL4_016	YES	
CKBL6	16.50	21.30	4.80	CKBL6_017	YES	
CKBL6	21.30	22.60	1.30	CKBL6_018	YES	
CKBL6	45.70	47.20	1.50	CKBL6_019	YES	
CKBL6	48.80	51.80	3.00	CKBL6_020	YES	

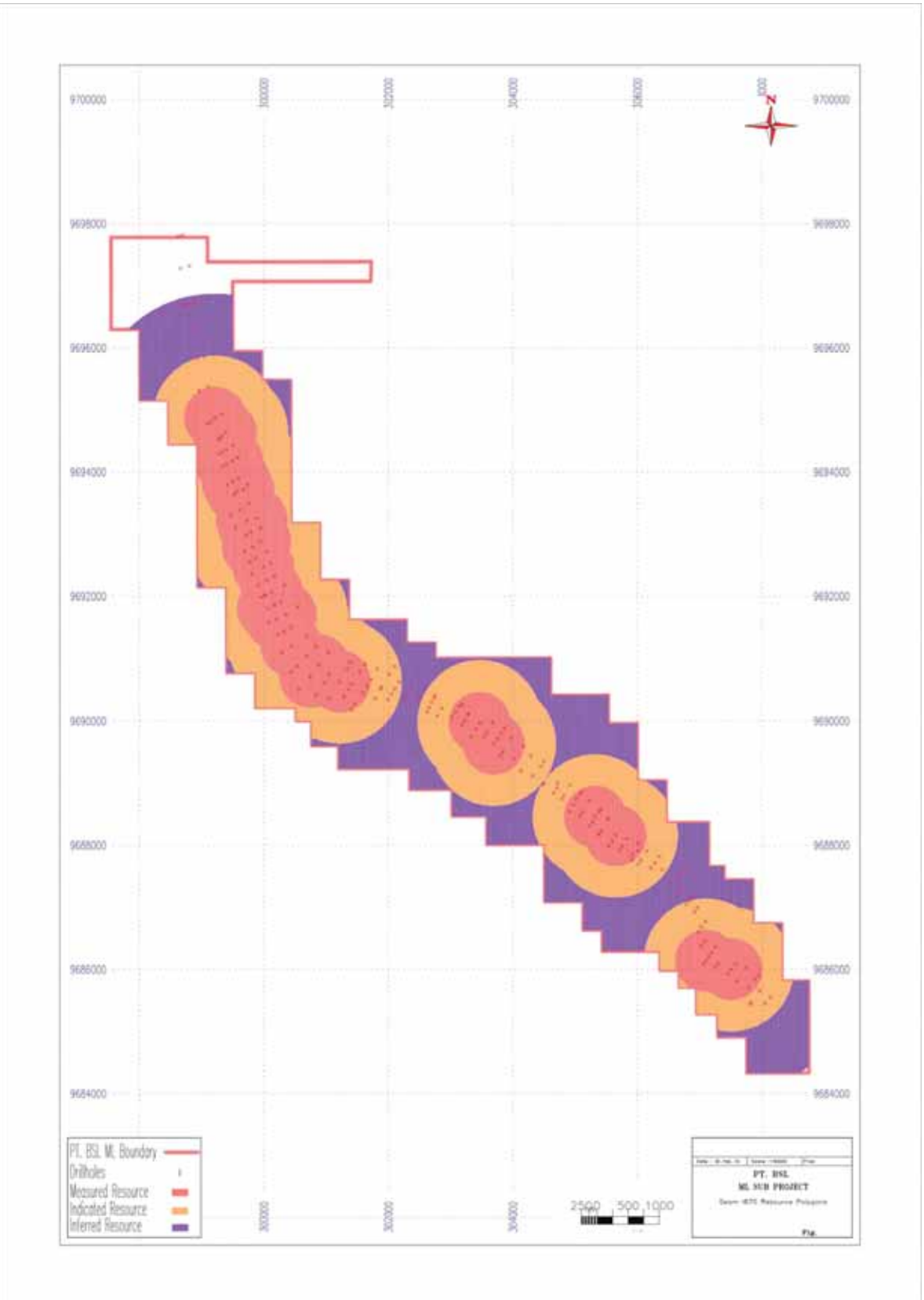
SALVA
Mining Consultants

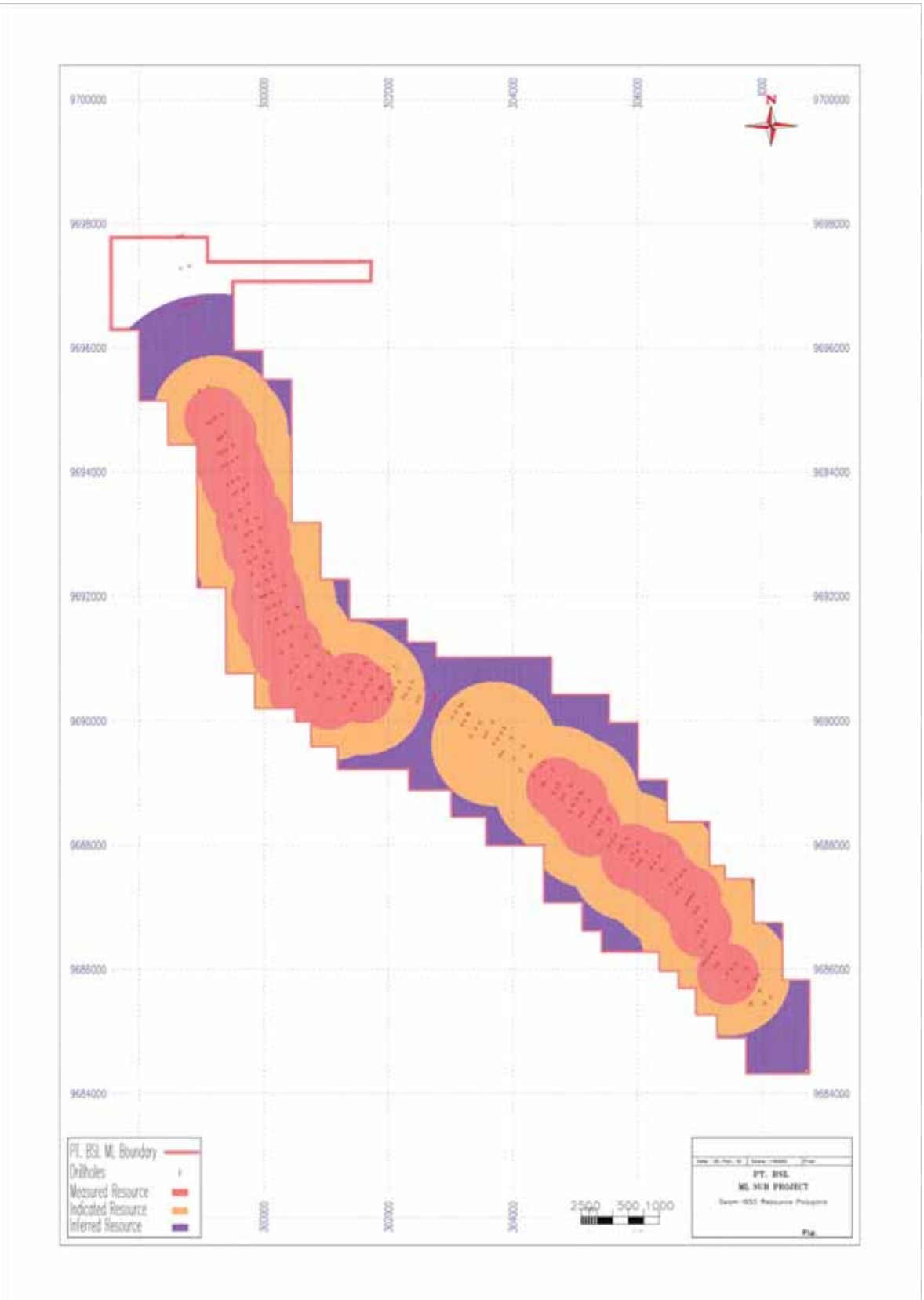
Belani BL						
HOLE No	FROM	TO	THICK	SAMPLE No	MODELLED	QA/QC
CKBL-5	20.80	30.55	9.75		NO	Seam correlation issue with neighbouring holes
CKBL-5	61.15	62.15	1.00		NO	Seam correlation issue with neighbouring holes
B005	20.40	21.30	0.90	B005CQ1	YES	
B005	26.20	28.55	2.35	B005CQ2	YES	
B005	84.20	90.00	5.80	B005CQ3	YES	
B006	47.20	50.80	3.60	B006CQ1	YES	
B006	51.45	71.40	19.95	B006CQ2	YES	
B007	21.40	22.65	1.25	B007CQ1	YES	
B007	26.40	29.20	2.80	B007CQ2	YES	
B009	5.40	11.00	5.60	B009CQ1	YES	
B009	31.00	32.50	1.50	B009CQ2	YES	
B009	37.50	39.75	2.25	B009CQ3	YES	
B009	101.10	103.00	1.90	B009CQ4	YES	
B009	103.50	115.60	12.10	B009CQ5	YES	
GTB001	19.60	21.60	2.00	GT001CQ1	YES	
GTB001	21.80	35.20	13.40	GT001CQ2	YES	
GTB001	52.60	54.60	2.00	GT001CQ3	YES	
RGT202203	0.00	4.90	4.90	RGTCQ1	YES	
RGT202203	4.90	5.60	0.70	RGTCQ2	YES	
TP06	0.00	1.40	1.40	TP06CQ1	YES	
TP06	1.40	2.80	1.40	TP06CQ2	YES	
TP06	2.80	4.20	1.40	TP06CQ3	YES	
TP06	4.20	5.60	1.40	TP06CQ4	YES	
RGT430	0.00	1.20	1.20	RGT430CQ1	YES	
RGT600	0.00	1.20	1.20	RGT600CQ1	YES	

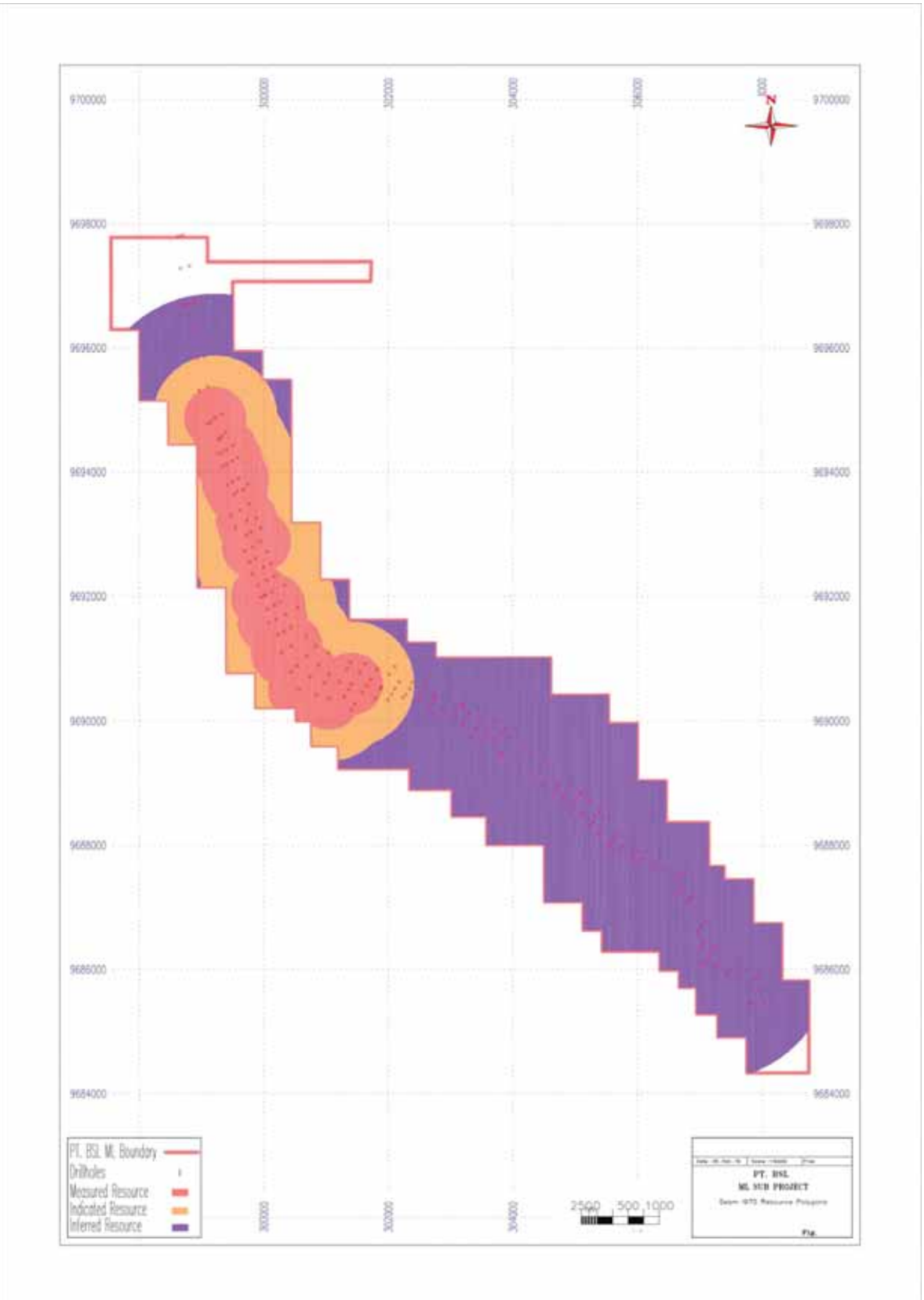
SALVA
Mining Consultants

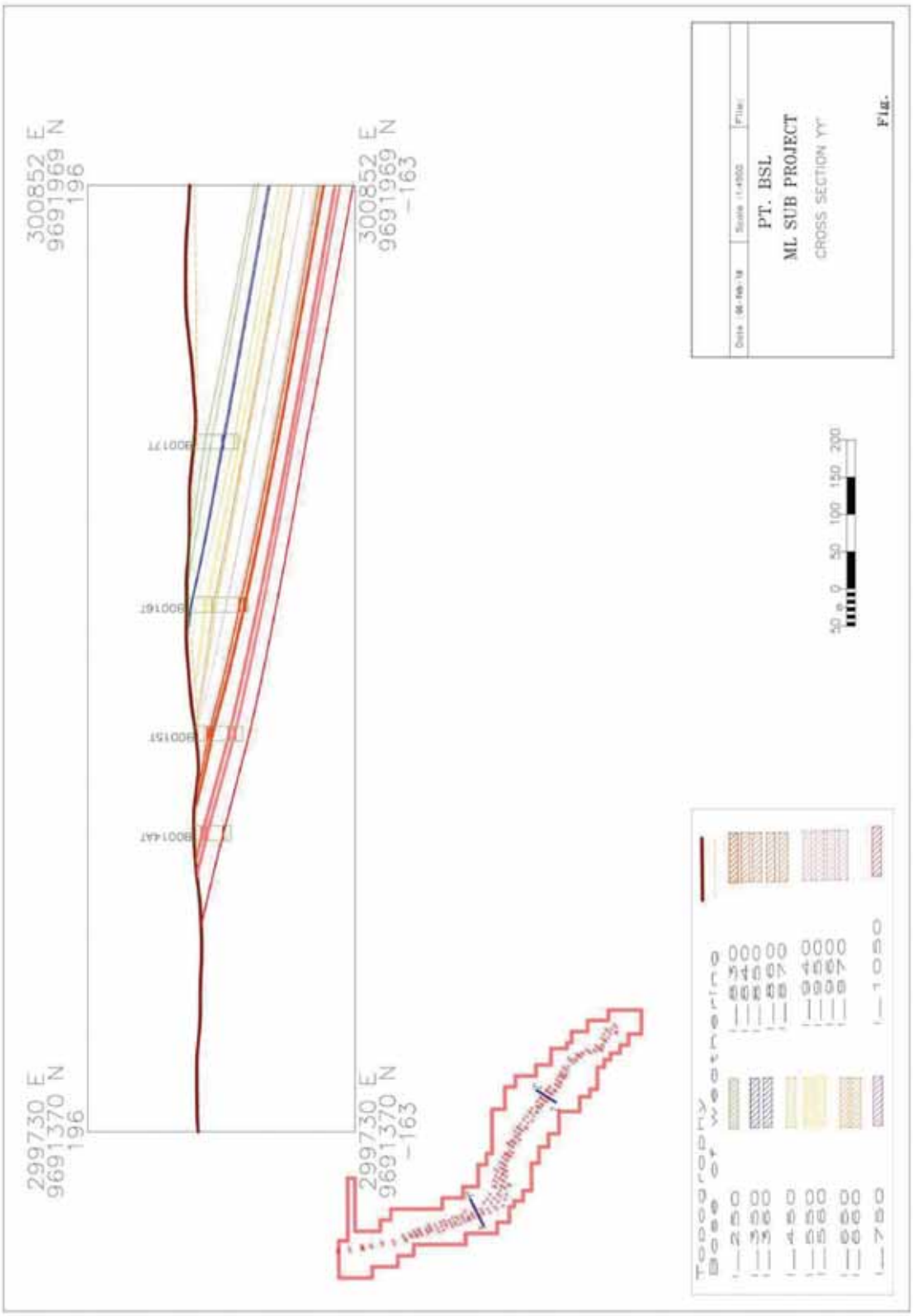
Appendix E: Plans, Sections and Resource Polygons

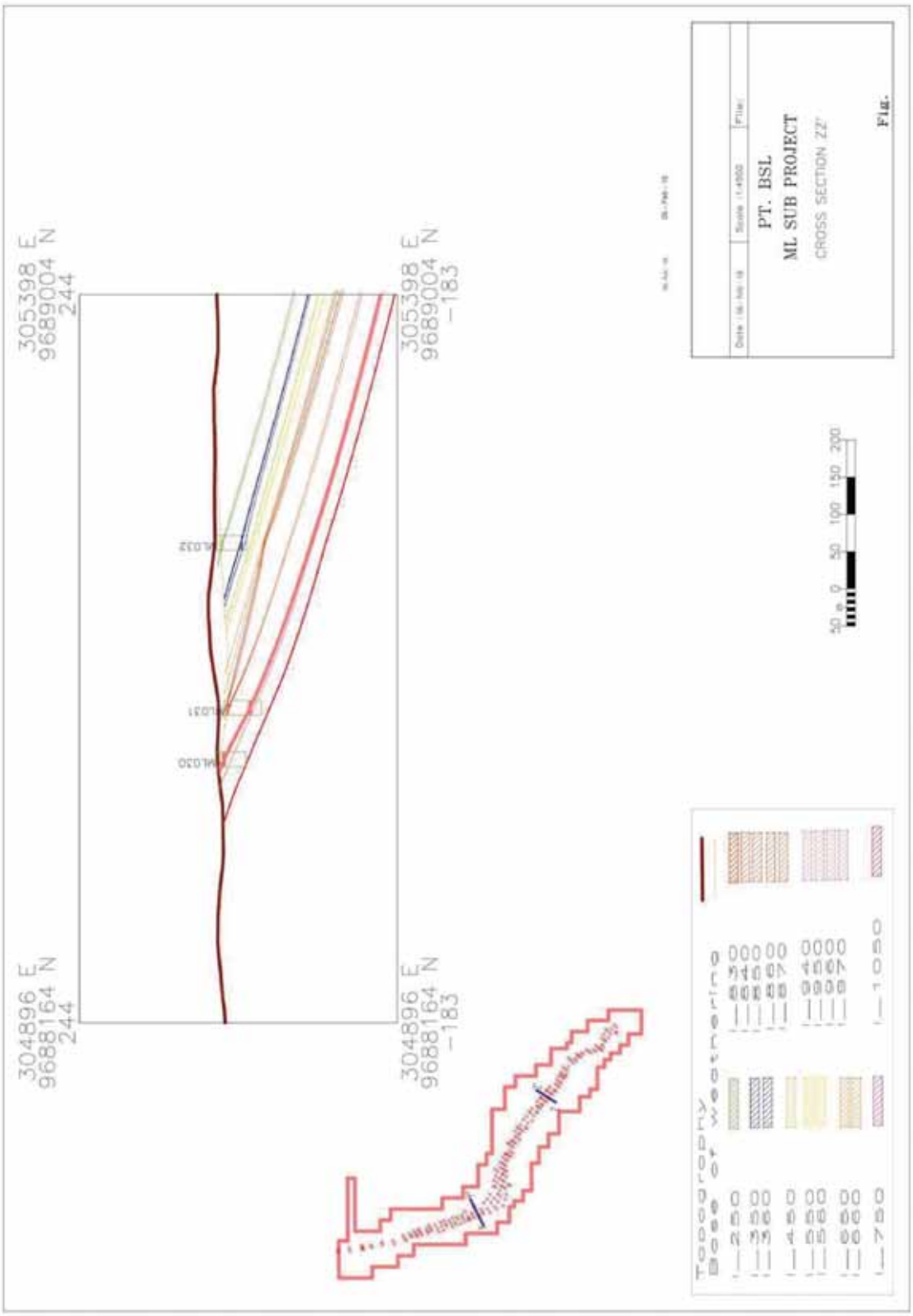


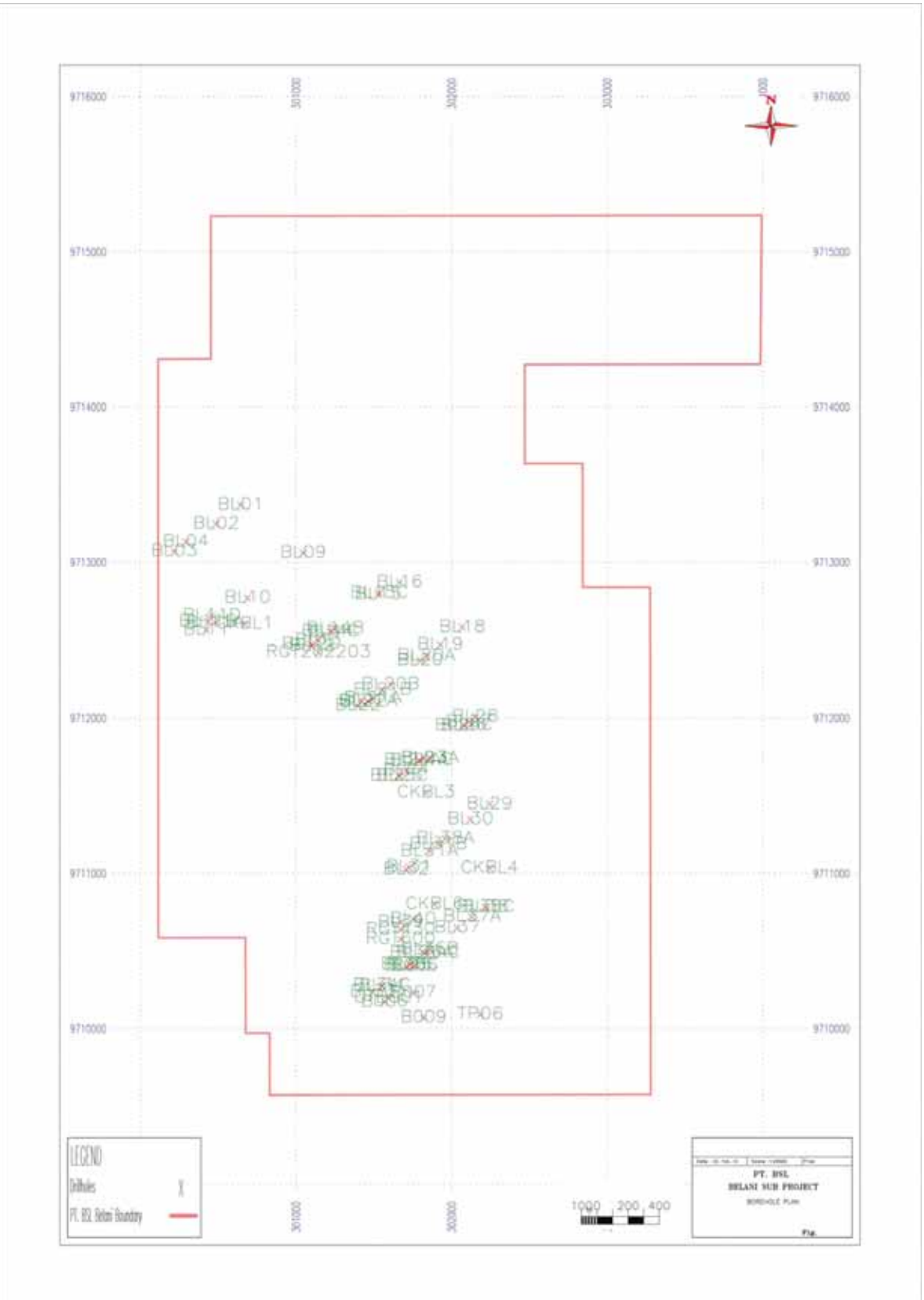

9700000
9698000
9696000
9694000
9692000
9690000
9688000
9686000
9684000
300000
302000
304000
306000
N
PT. BSL M. Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
2500
500
1000
PT. BSL
ML SUB PROJECT


9700000
9698000
9696000
9694000
9692000
9690000
9688000
9686000
9684000
300000
302000
304000
306000
N
PT. BSL M. Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
2560
500
1000
PT. BSL
ML SUB PROJECT

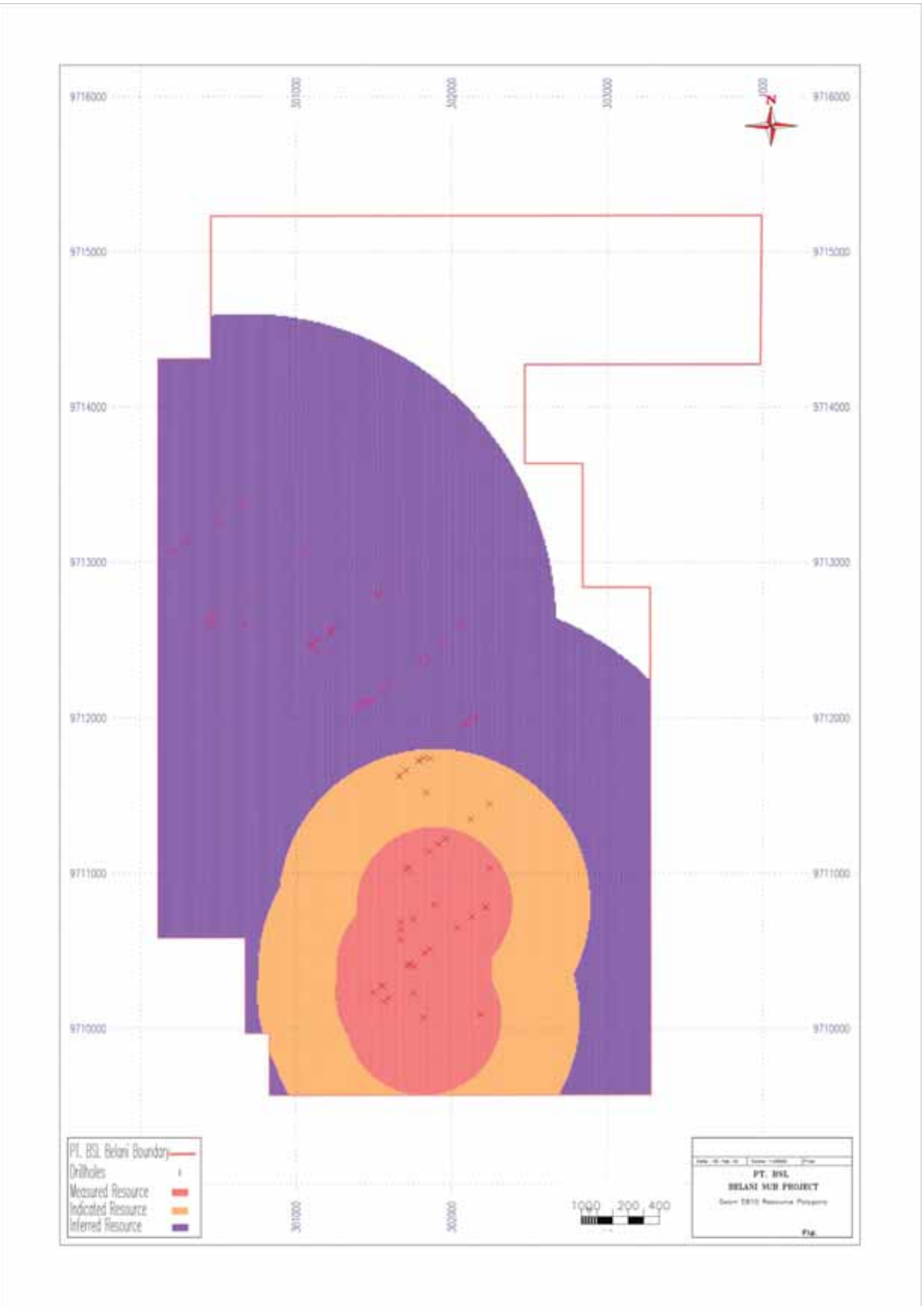

9700000
9698000
9696000
9694000
9692000
9690000
9688000
9686000
9684000
300000
302000
304000
306000
N
PT. BSL ML Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
2500
500
1000
PT. BSL
ML SUB PROJECT

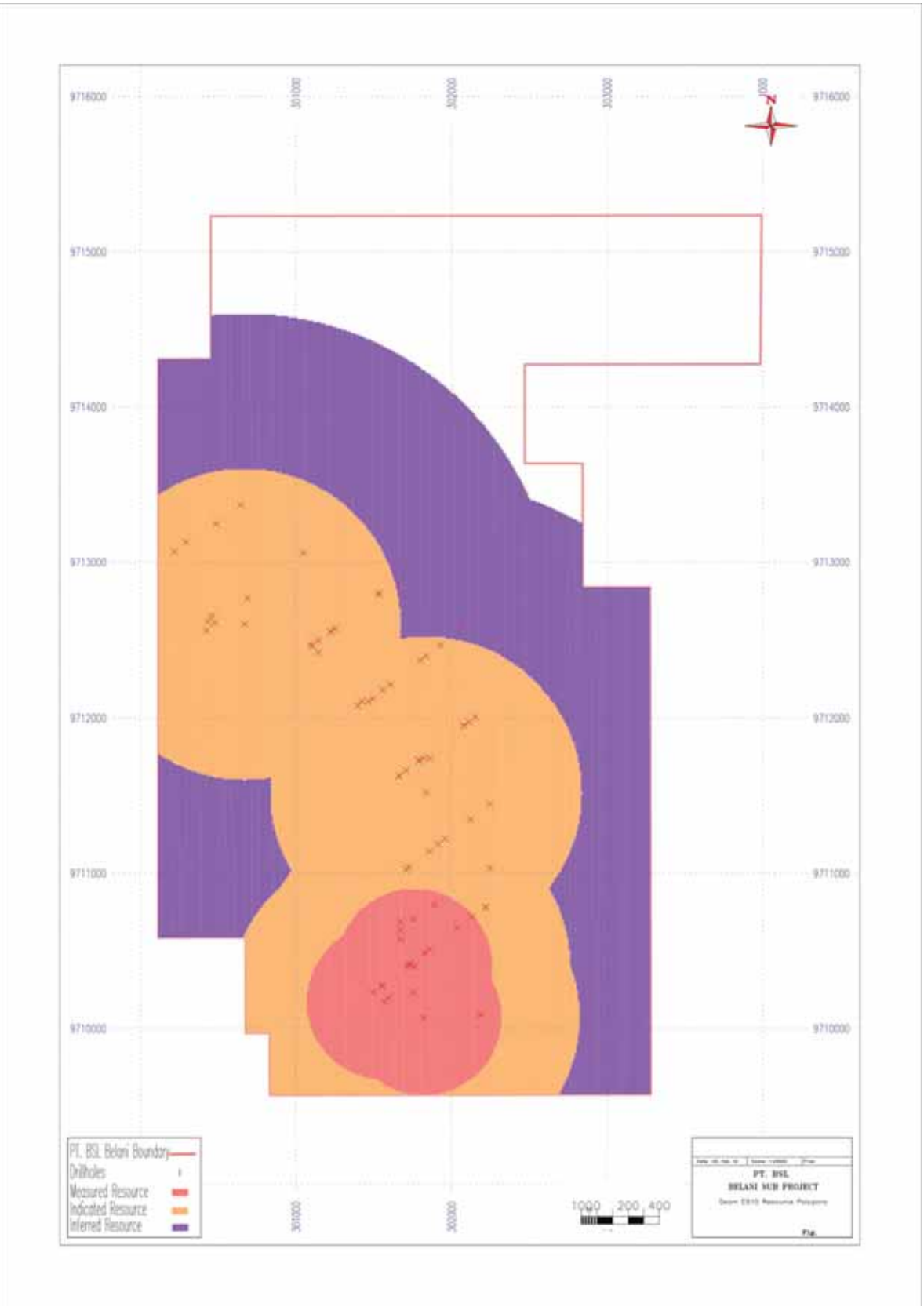

300852 E
9691969 N
196
300852 E
9691969 N
-163
299730 E
9691370 N
196
299730 E
9691370 N
-163
PT. BSL
ML SUB PROJECT
CROSS SECTION YY'
Fig.
0
50
100
150
200

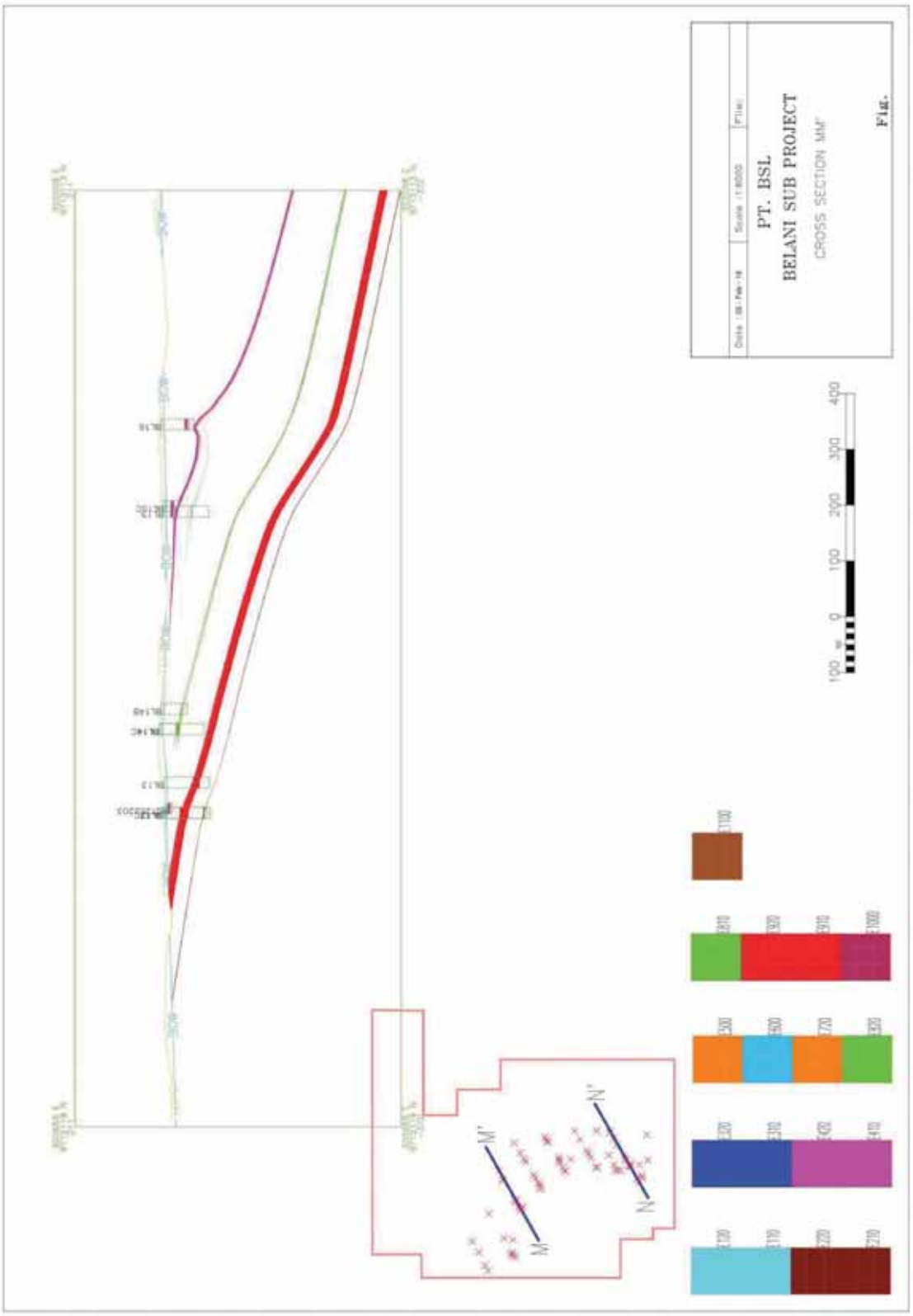

305398 E
9689004 N
244
305398 E
9689004 N
-183
304896 E
9688164 N
244
304896 E
9688164 N
-183
PT. BSL
ML SUB PROJECT
CROSS SECTION Z2'
Fig.
0
50
100
150
200

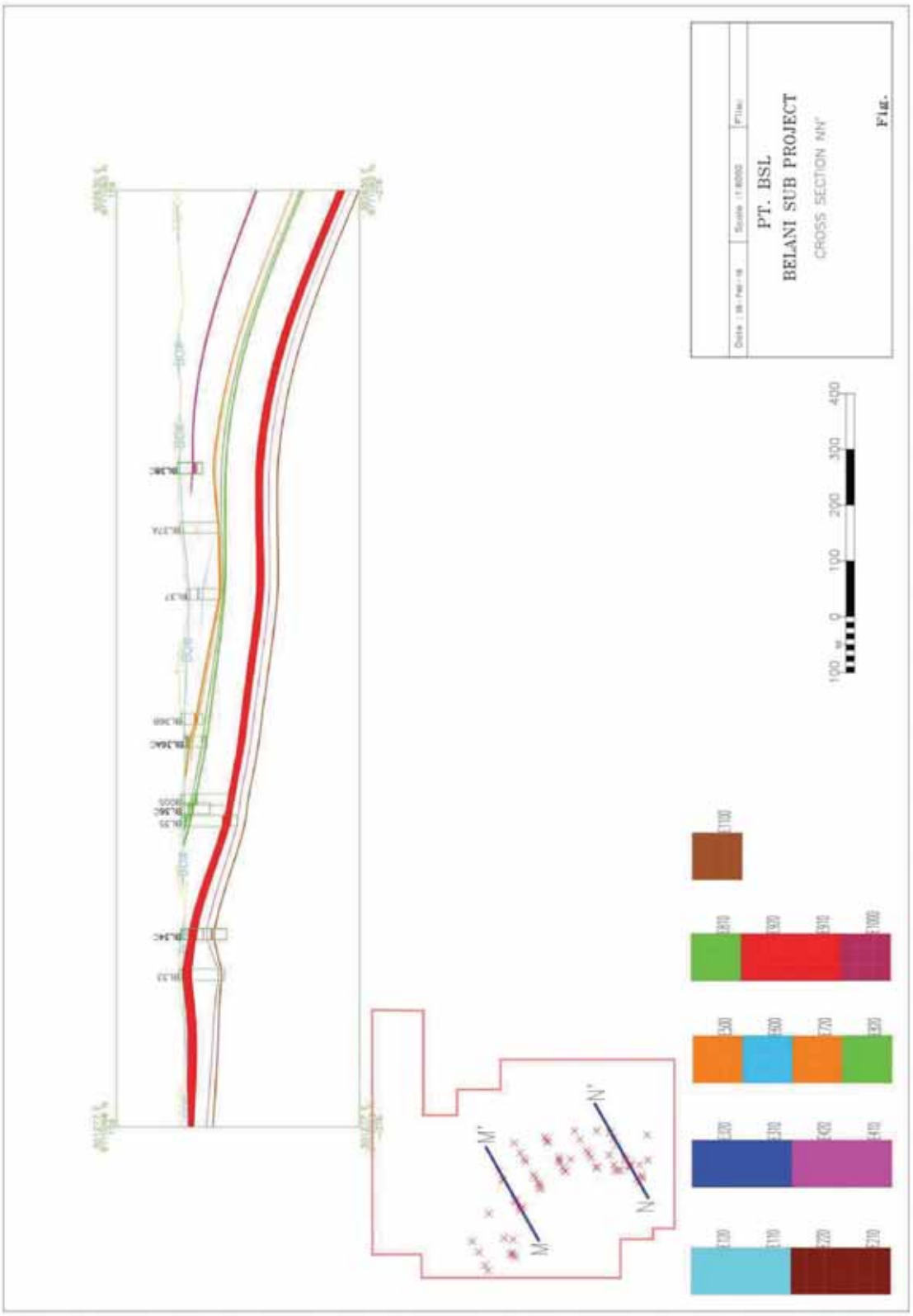

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
BLx01
BLx02
BLx03
BLx04
BLx09
BLx10
BLx16
BLx18
BLx19
BLx20A
CKBL3
BLx29
BLx30
CKBL4
B009
TP06
LEGEND
Drillholes
PT. BSL Belani Boundary
1000 200 400
PT. BSL
BELANI SUB PROJECT
BOREHOLE PLAN

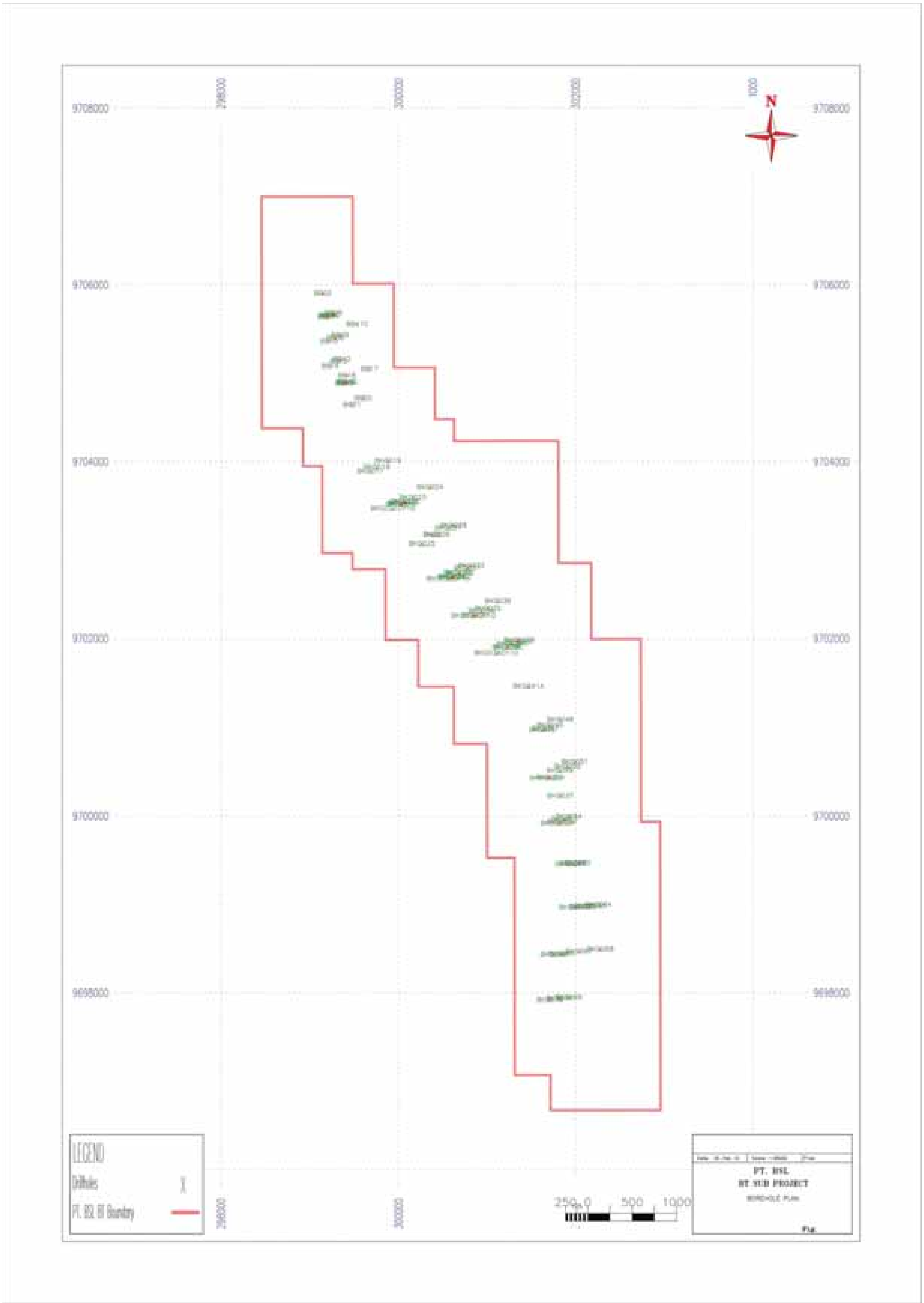

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
PT. BSL Belani Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
1000 200 400
PT. BSL
BELANI SUB PROJECT

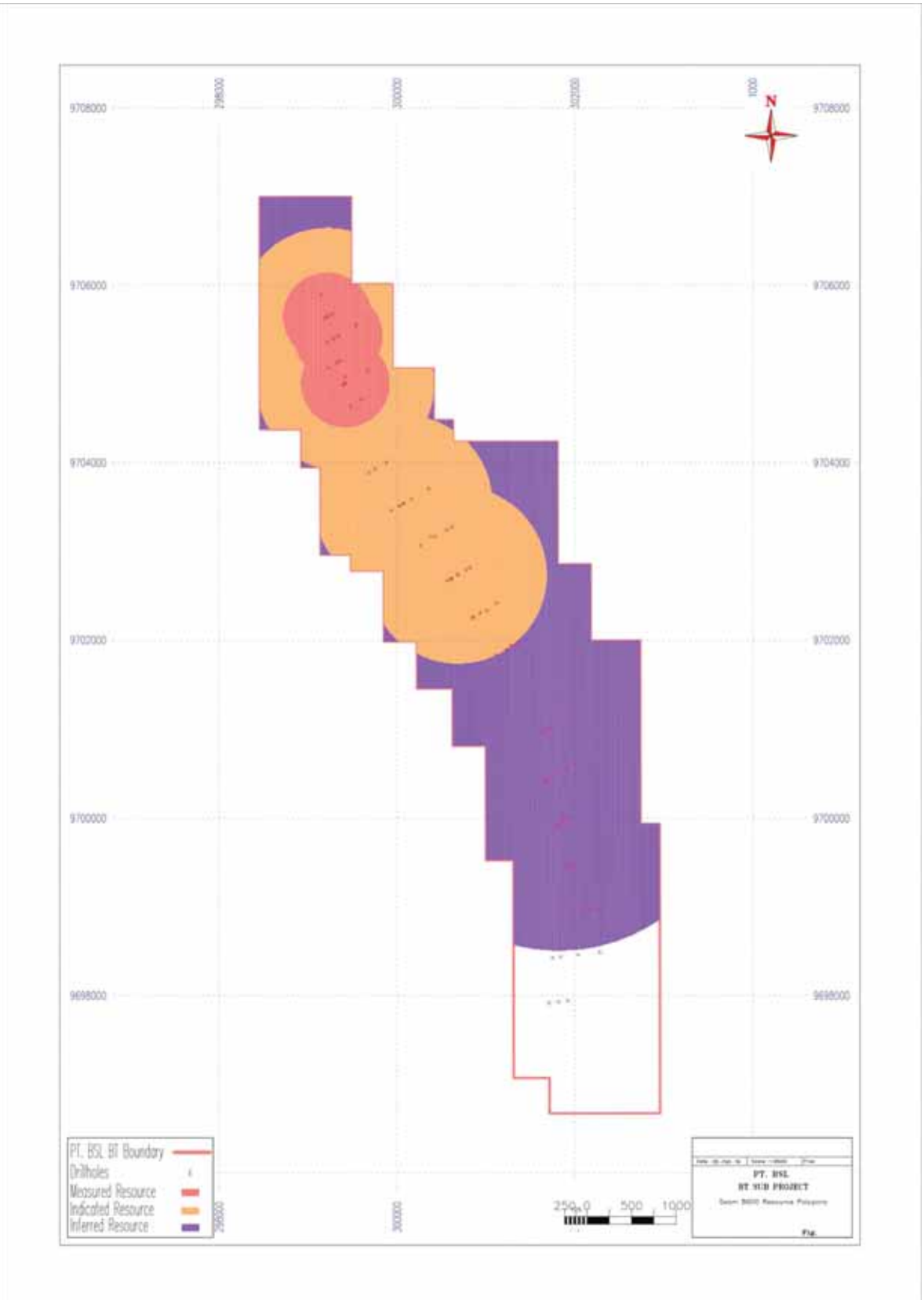

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
PT. BSL Belani Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
1000 200 400
PT. BSL
BELANI SUB PROJECT

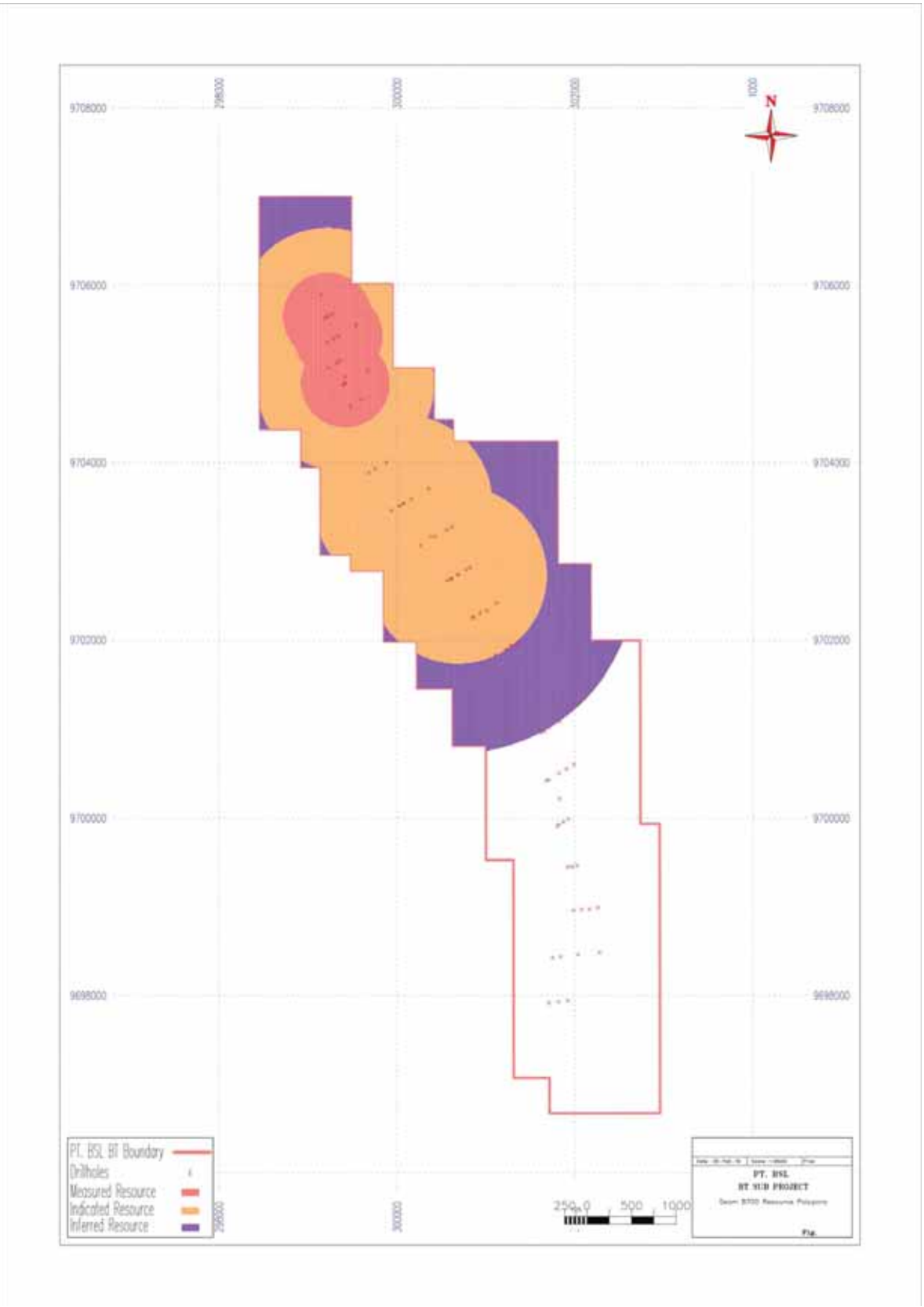

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
PT. BSL Belani Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
1000 200 400
PT. BSL
BELANI SUB PROJECT

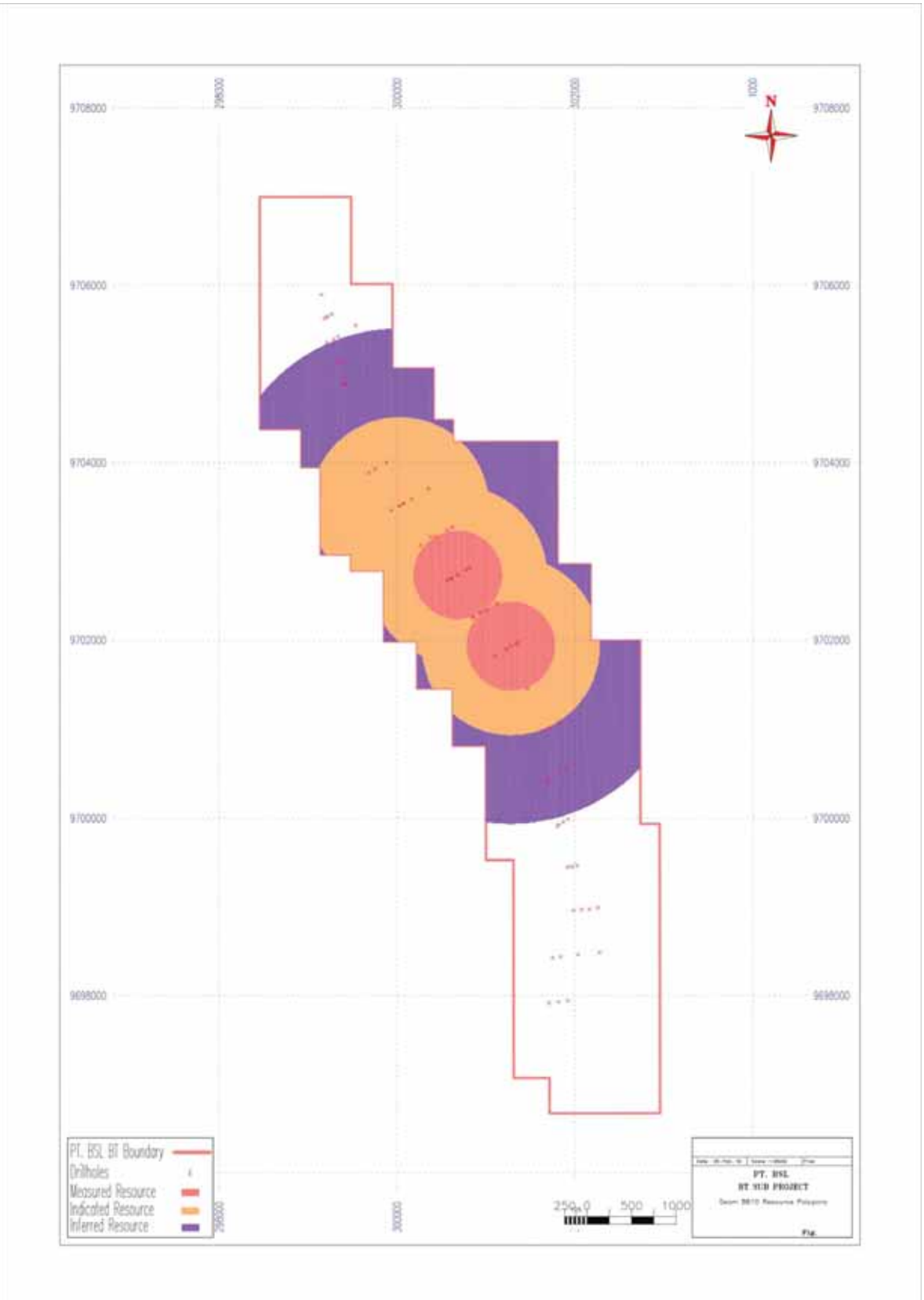

PT. BSL
BELANI SUB PROJECT
CROSS SECTION M-M'
Fig.
M
M'
N
N'

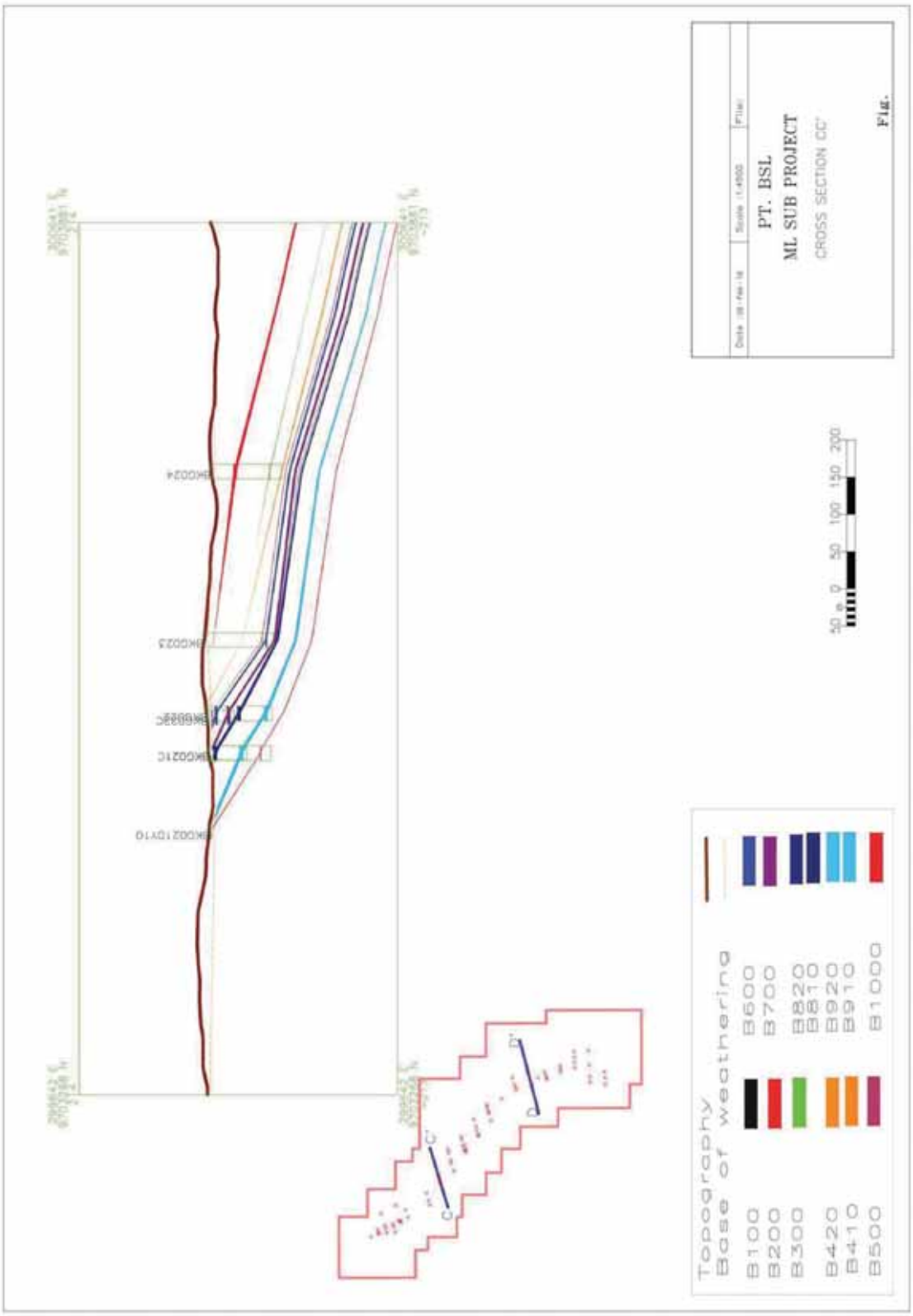

PT. BSL
BELANI SUB PROJECT
CROSS SECTION NN'
Fig.
M'
M
N'
N

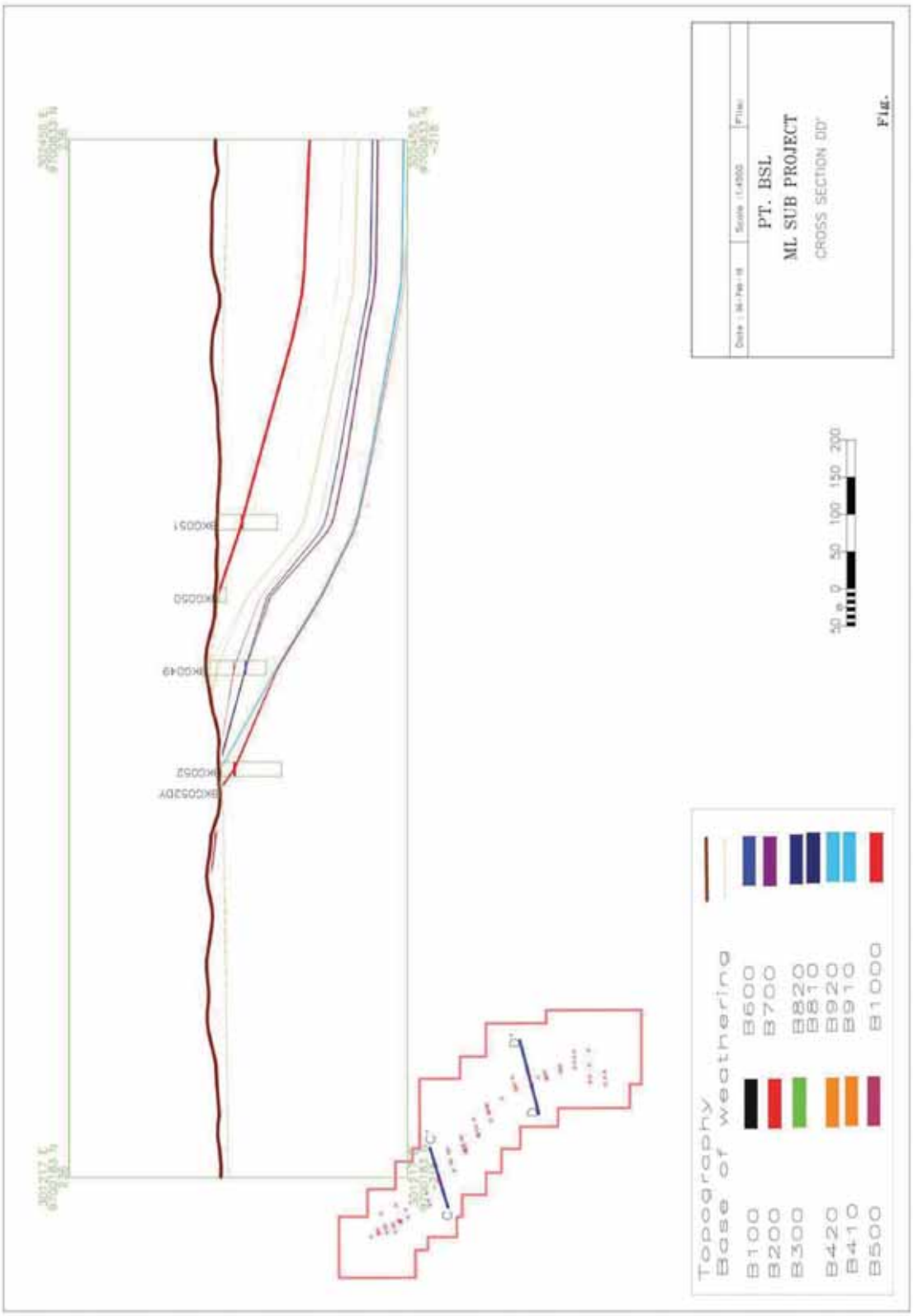

9708000
9706000
9704000
9702000
9700000
9698000
300000
N
LEGEND
Drillholes
PT. BSL BT Boundary
250 0 500 1000
PT. BSL
BT SUB PROJECT
BOREHOLE PLAN
Fig.

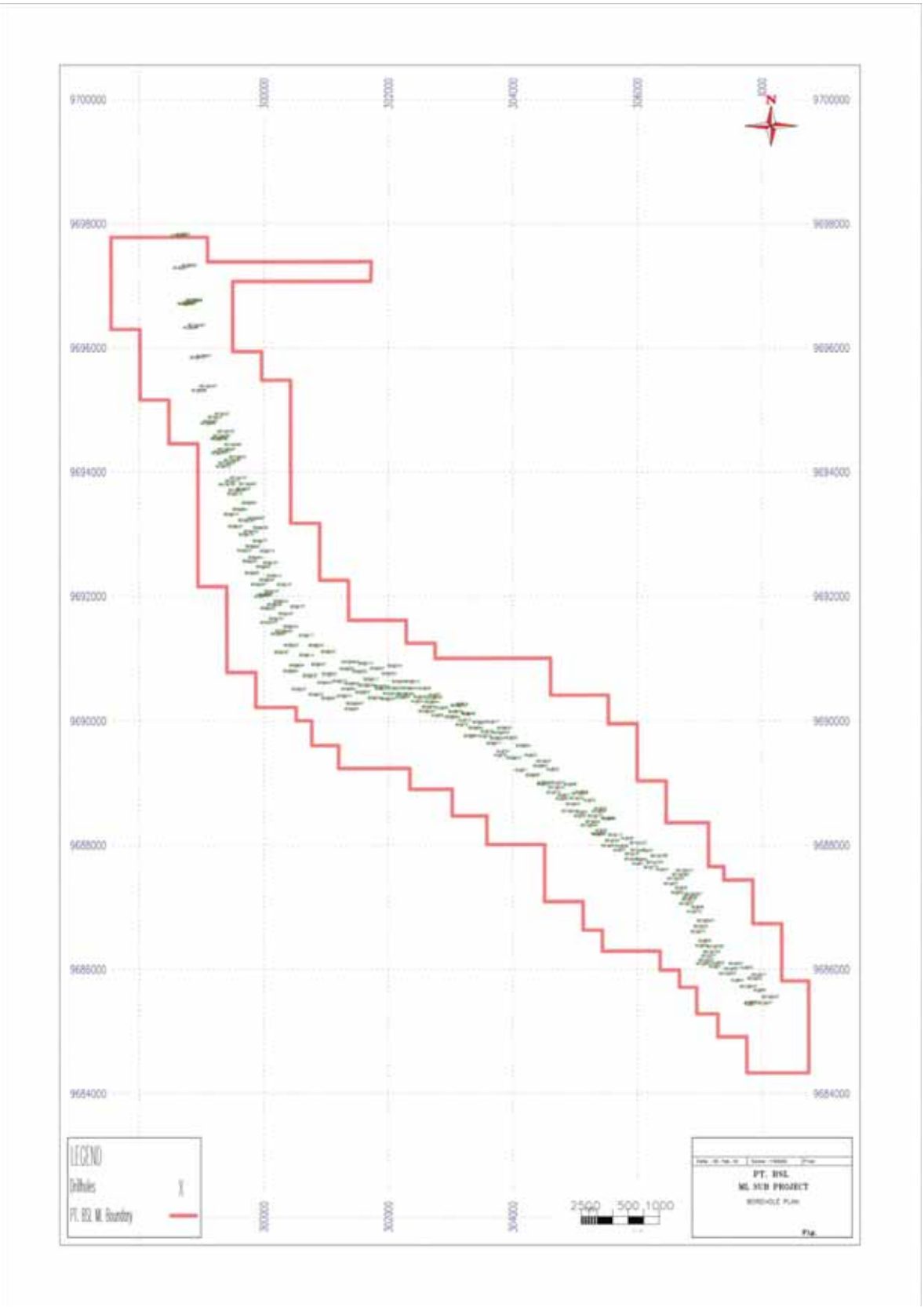

9708000
9706000
9704000
9702000
9700000
9698000
298000
300000
302000
N
PT. BSL BT Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
0 500 1000
PT. BSL
BT SUB PROJECT

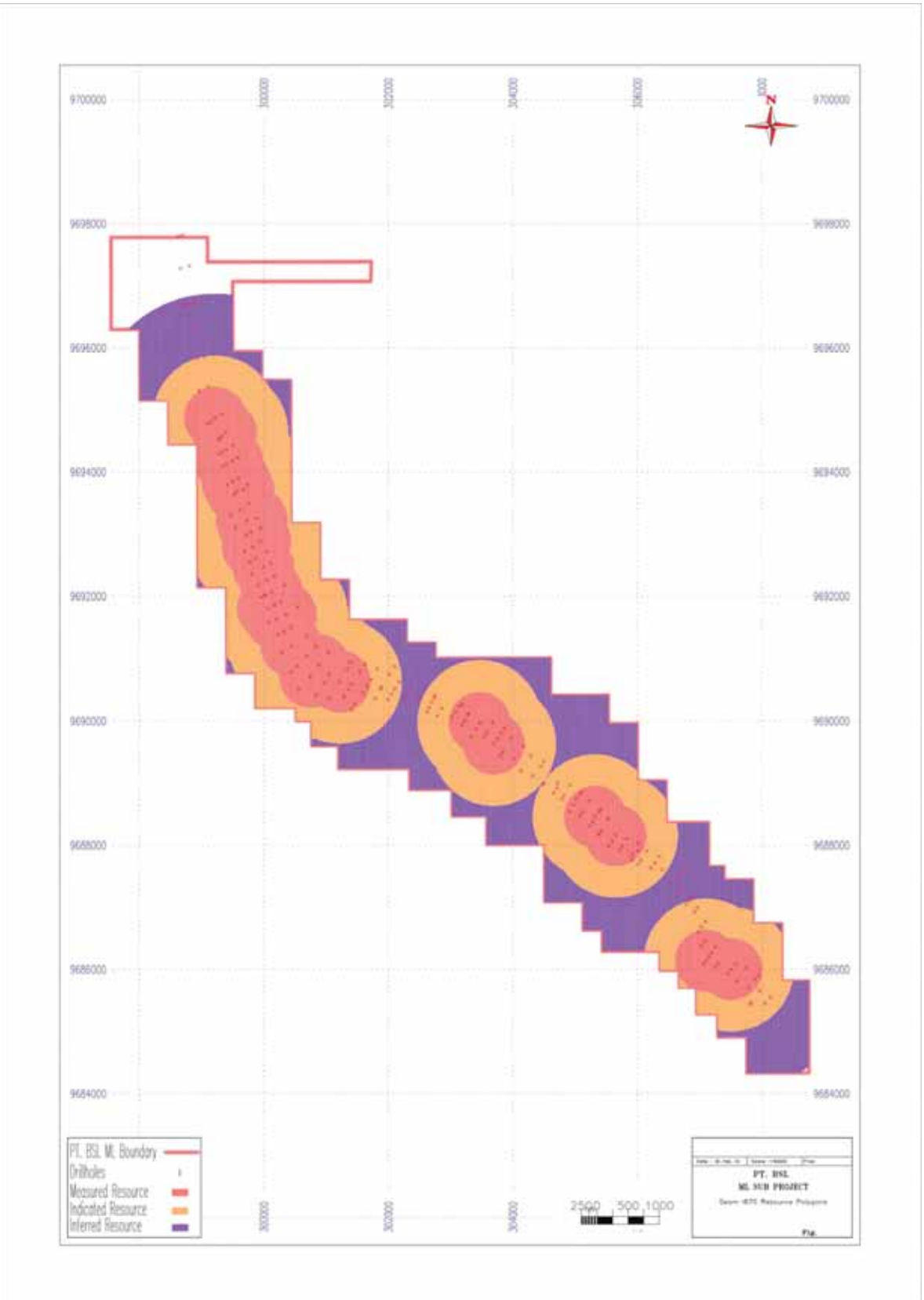

9708000
9706000
9704000
9702000
9700000
9698000
298000
300000
302000
N
PT. BSL BT Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
250 0 500 1000
PT. BSL
BT SUB PROJECT

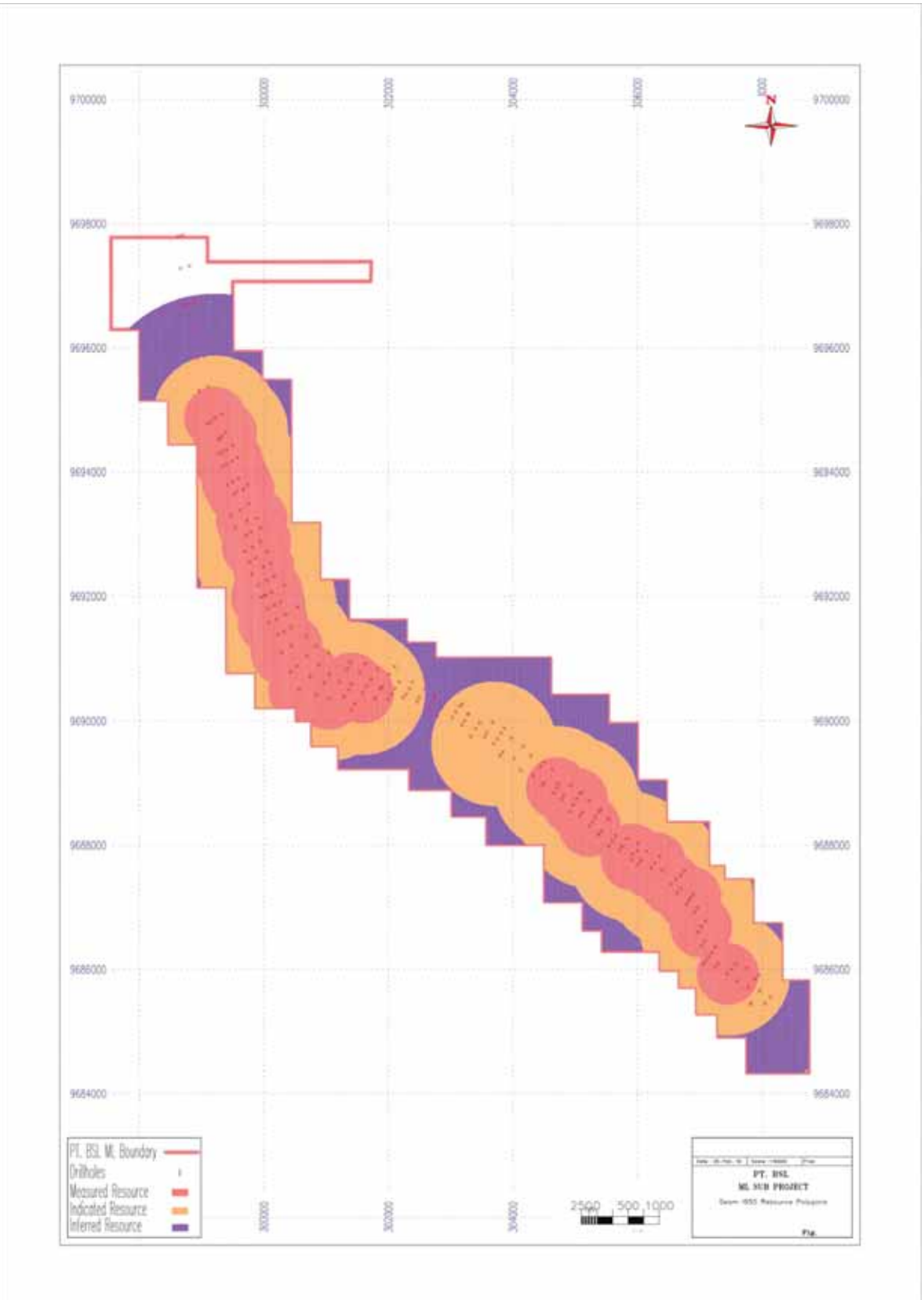

9708000
9706000
9704000
9702000
9700000
9698000
295000
300000
302000
1000
N
PT. BSL IUP Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
250 0 500 1000
PT. BSL
IUP NIH PROJECT

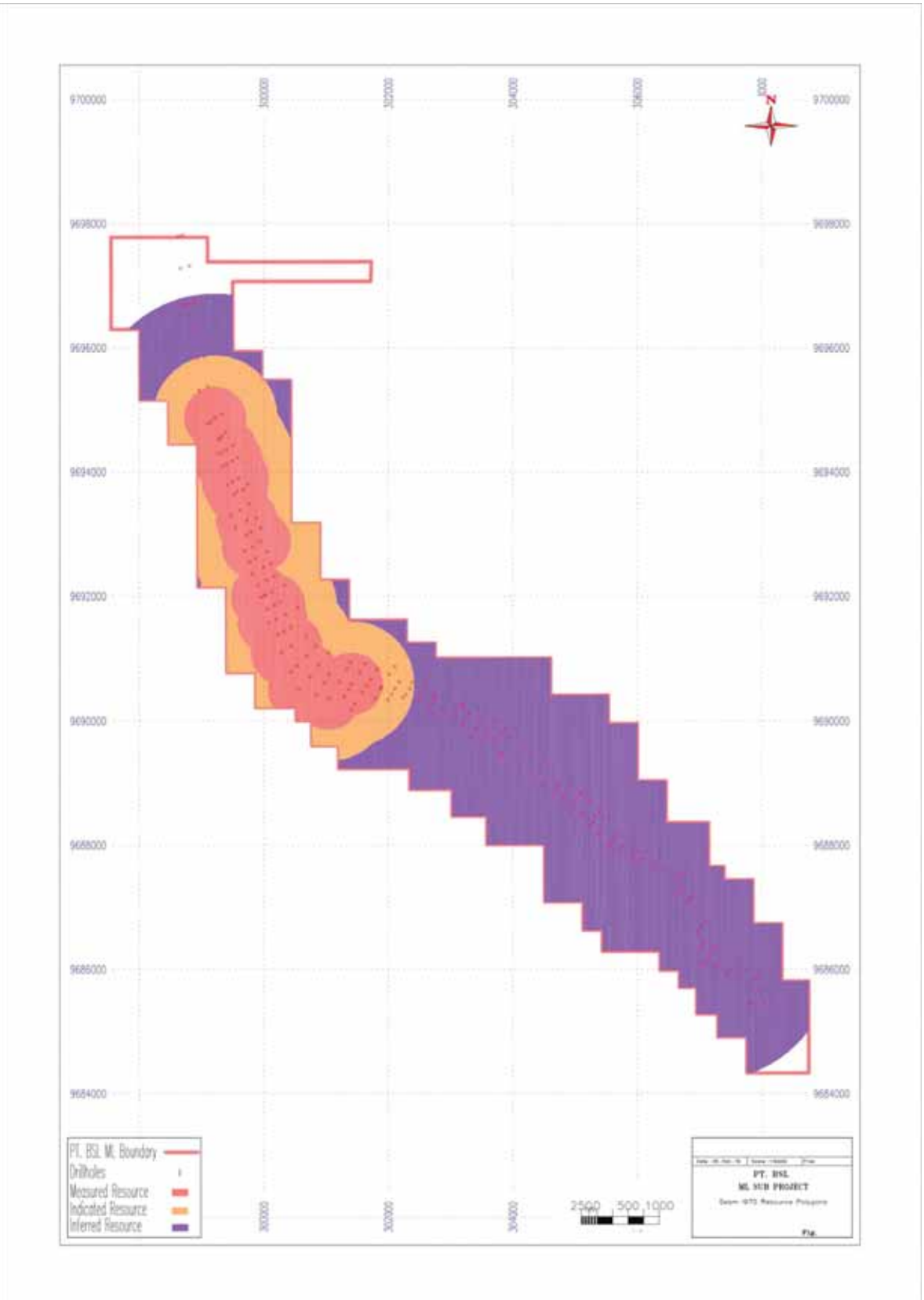

PT. BSL
ML SUB PROJECT
CROSS SECTION CC'
Fig.
Topography
Base of weathering
B100
B200
B300
B420
B410
B500
B600
B700
B820
B810
B920
B910
B1000
C
C'
D
D'

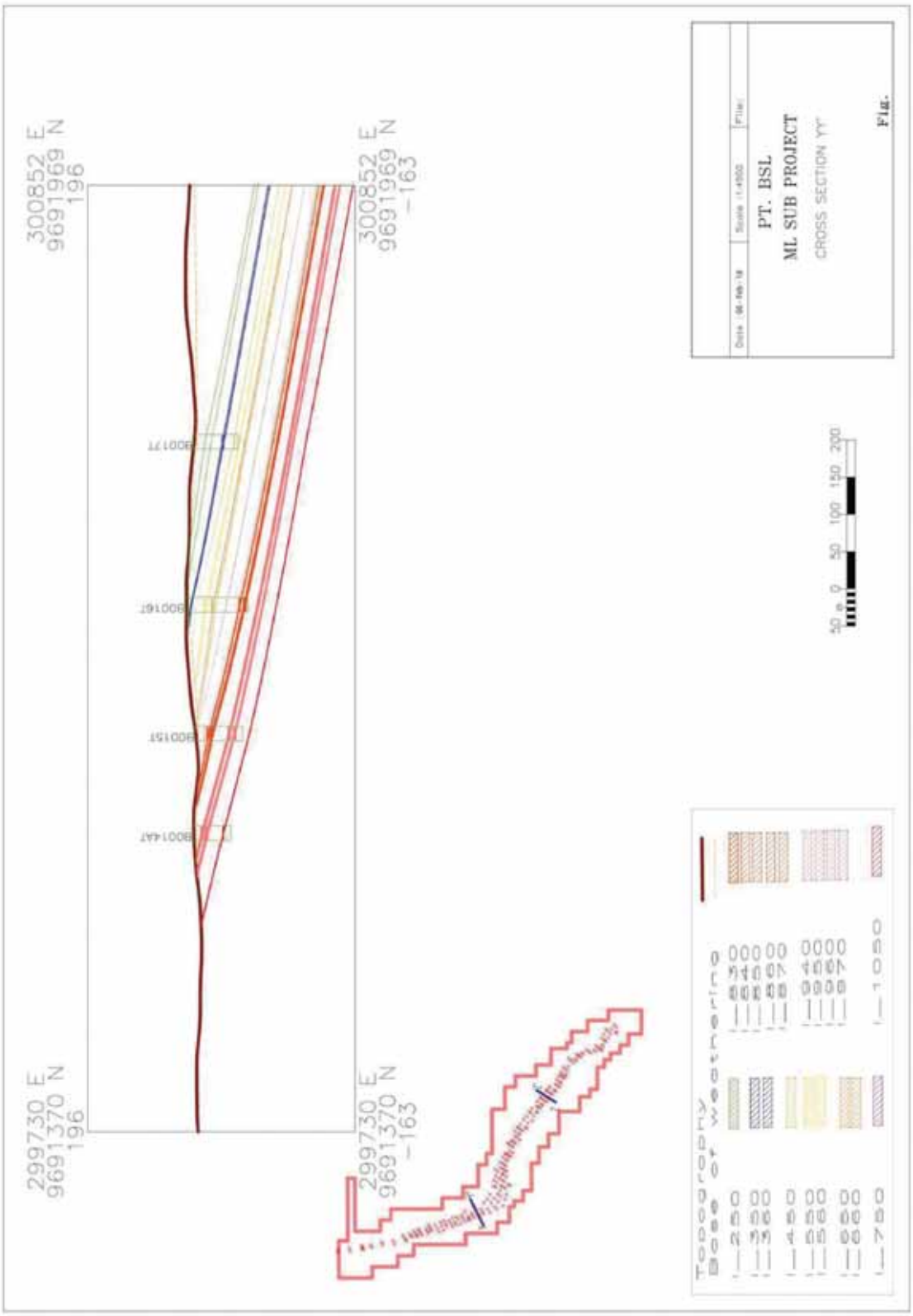

PT. BSL
ML SUB PROJECT
CROSS SECTION DD'
Fig.
Topography
Base of weathering
B100
B200
B300
B420
B410
B500
B600
B700
B820
B810
B920
B910
B1000
0
50
100
150
200
C
C'
D
D'

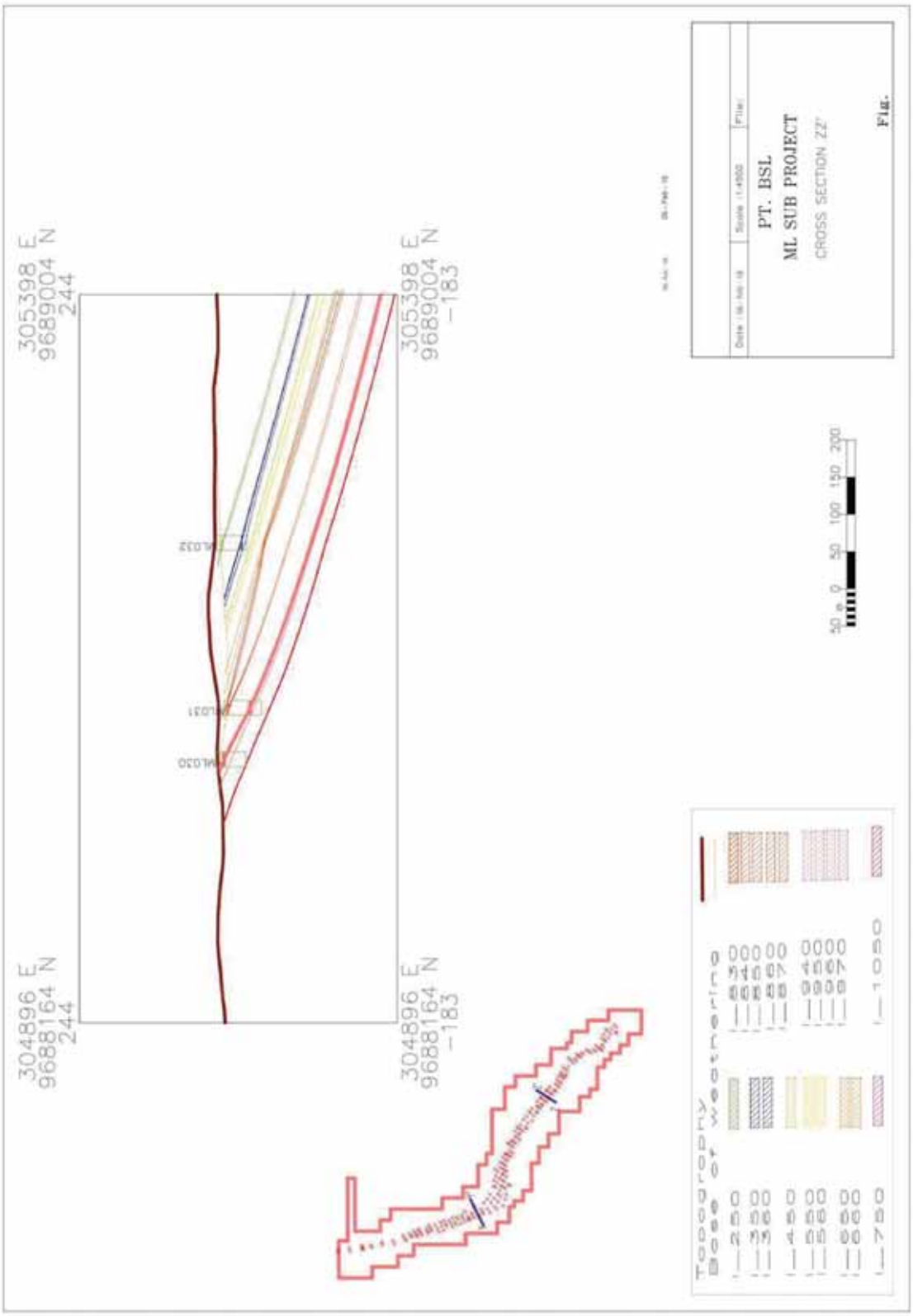

9700000
9698000
9696000
9694000
9692000
9690000
9688000
9686000
9684000
300000
302000
304000
306000
N
LEGEND
Drillholes
PT. BSL M. Boundary
2500 500 1000
PT. BSL
ML SUB PROJECT

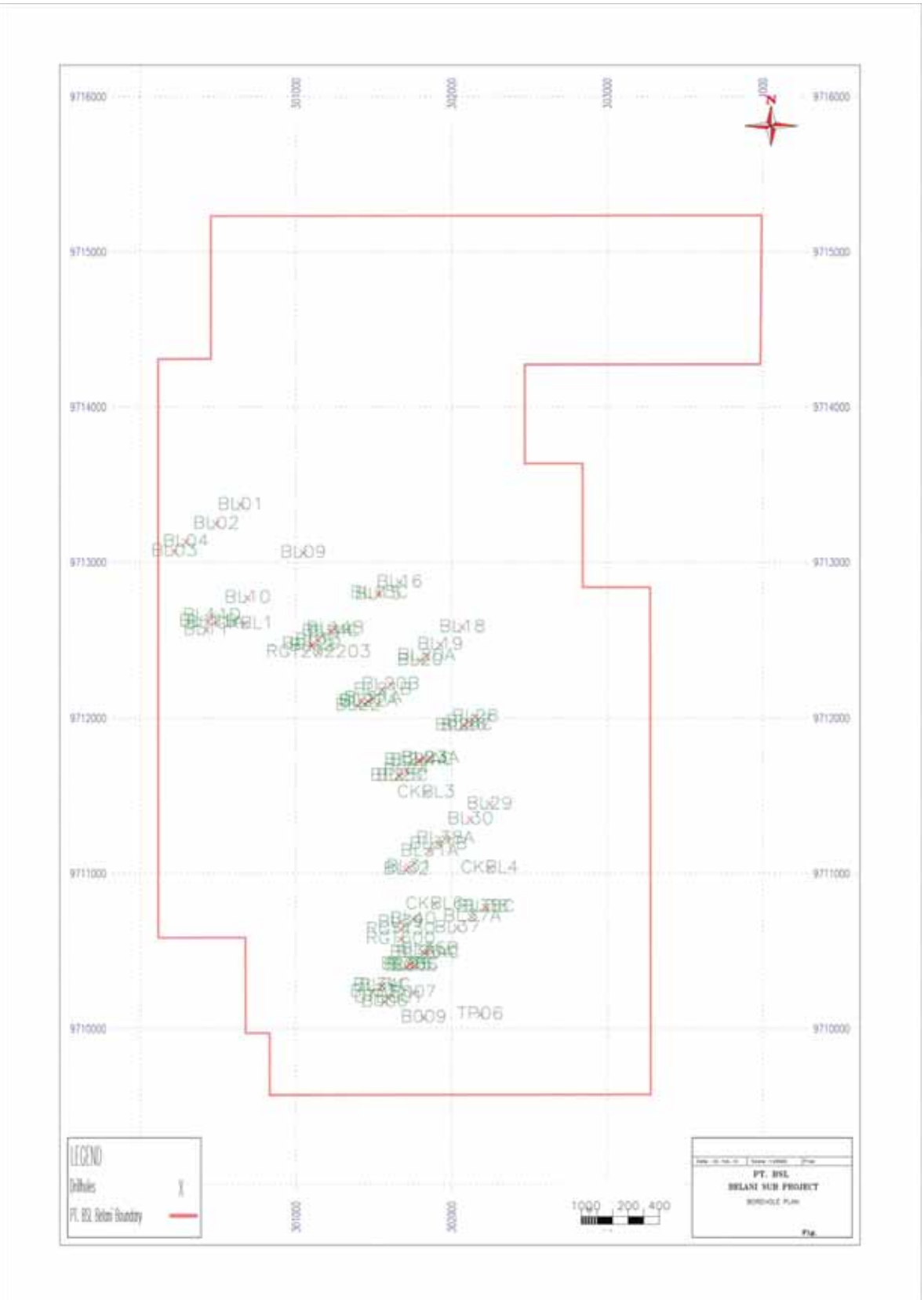

9700000
9698000
9696000
9694000
9692000
9690000
9688000
9686000
9684000
300000
302000
304000
306000
N
PT. BSL M. Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
2500
500
1000
PT. BSL
ML SUB PROJECT


9700000
9698000
9696000
9694000
9692000
9690000
9688000
9686000
9684000
300000
302000
304000
306000
N
PT. BSL ML Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
2500
500
1000
PT. BSL
ML SUB PROJECT

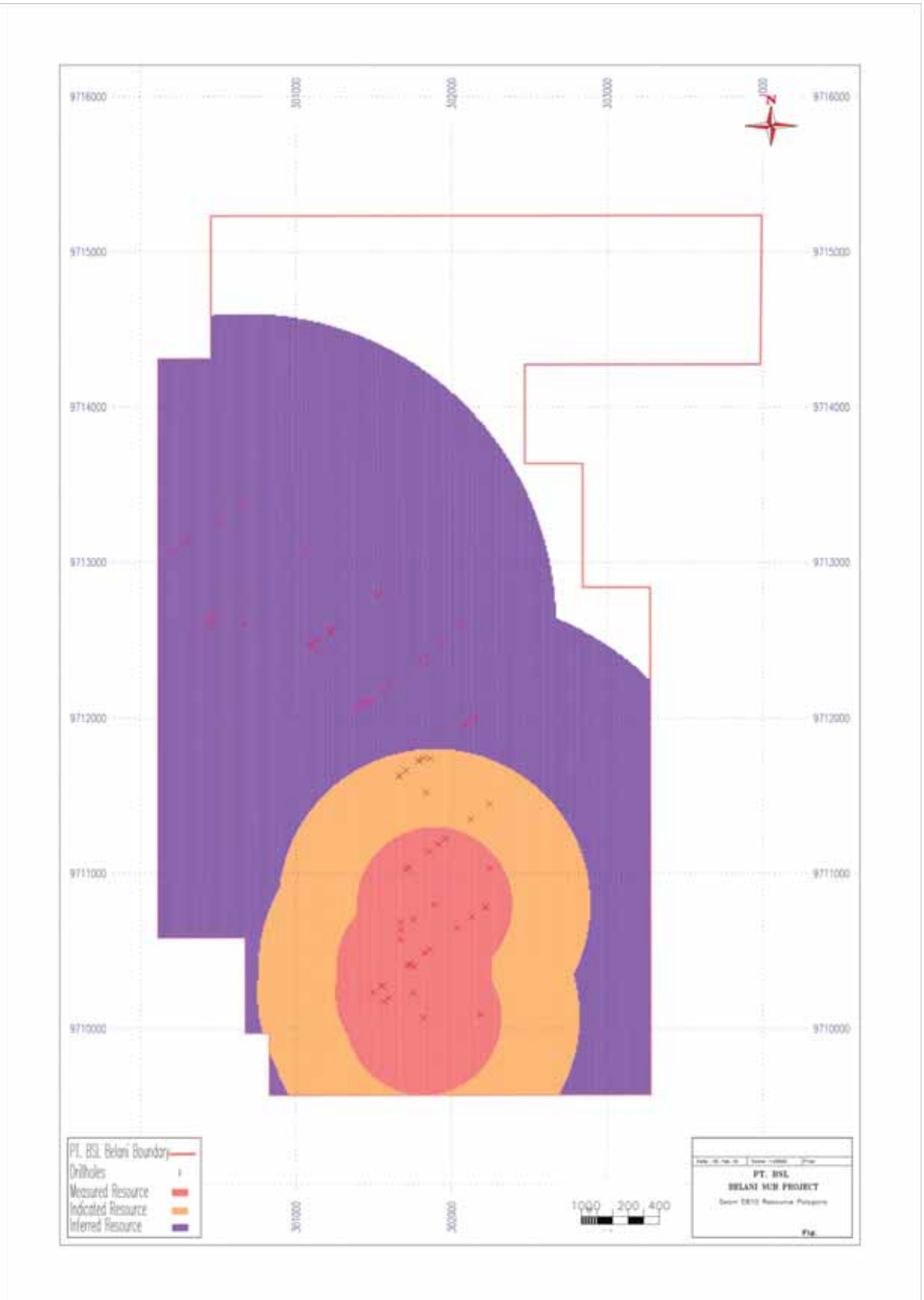

9700000
9698000
9696000
9694000
9692000
9690000
9688000
9686000
9684000
300000
302000
304000
306000
N
PT. BSL M. Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
2500
500
1000
PT. BSL
ML SUB PROJECT

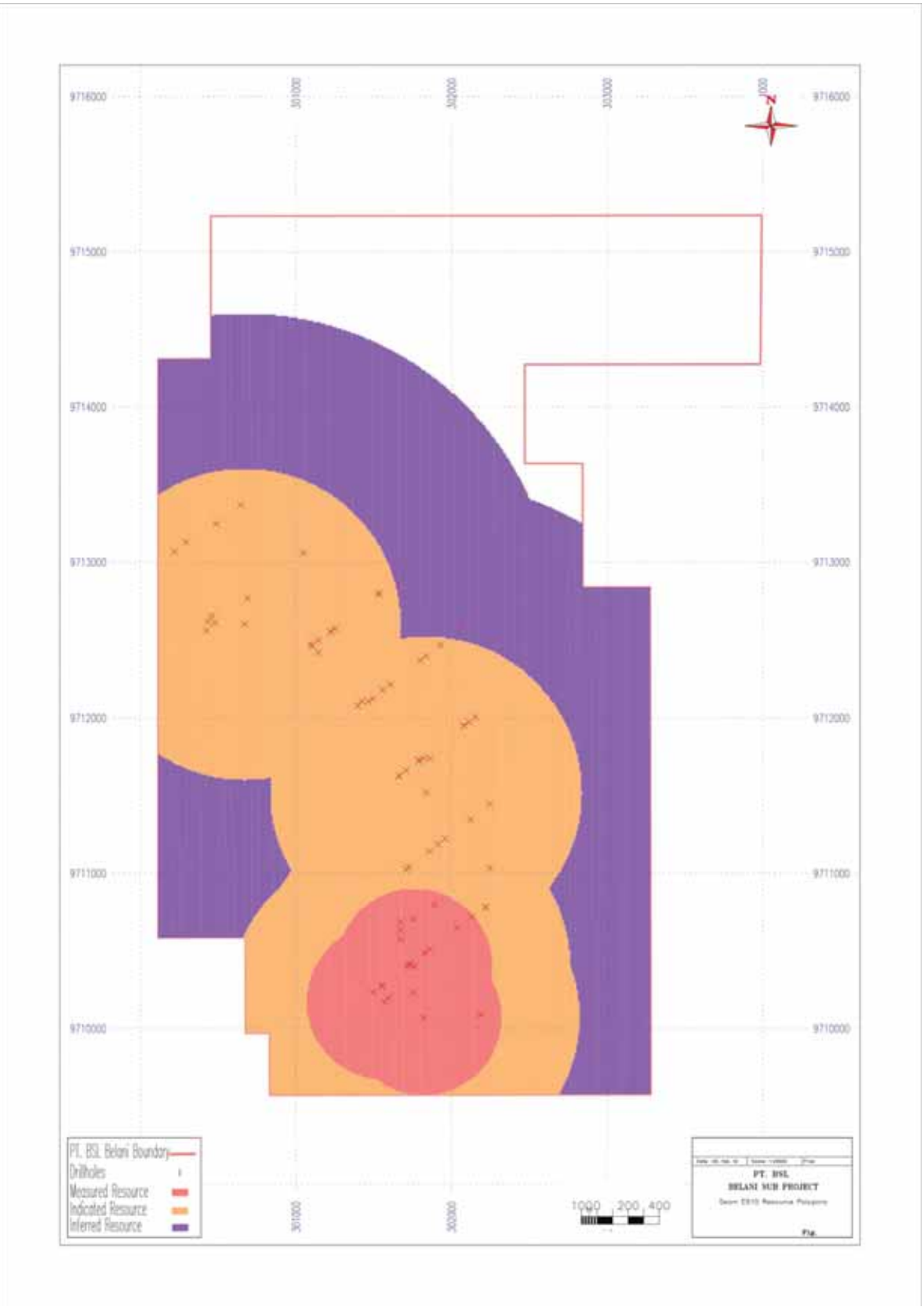

300852 E
9691969 N
196
300852 E
9691969 N
-163
299730 E
9691370 N
196
299730 E
9691370 N
-163
PT. BSL
ML SUB PROJECT
CROSS SECTION YY'
Fig.
Topography
Base of weathering

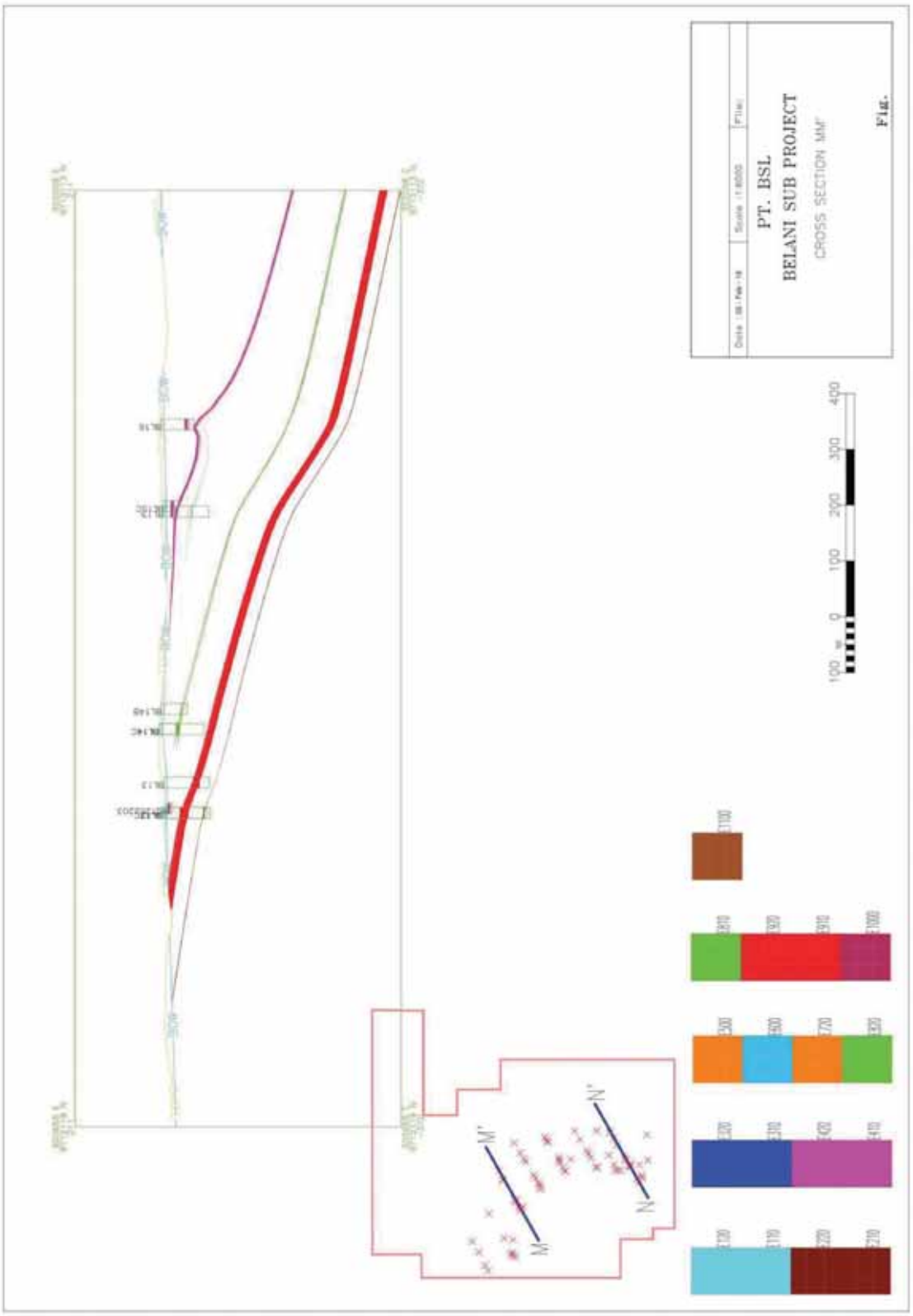

305398 E
9689004 N
244
305398 E
9689004 N
-183
304896 E
9688164 N
244
304896 E
9688164 N
-183
PT. BSL
ML SUB PROJECT
CROSS SECTION Z2'
Fig.
0
50
100
150
200

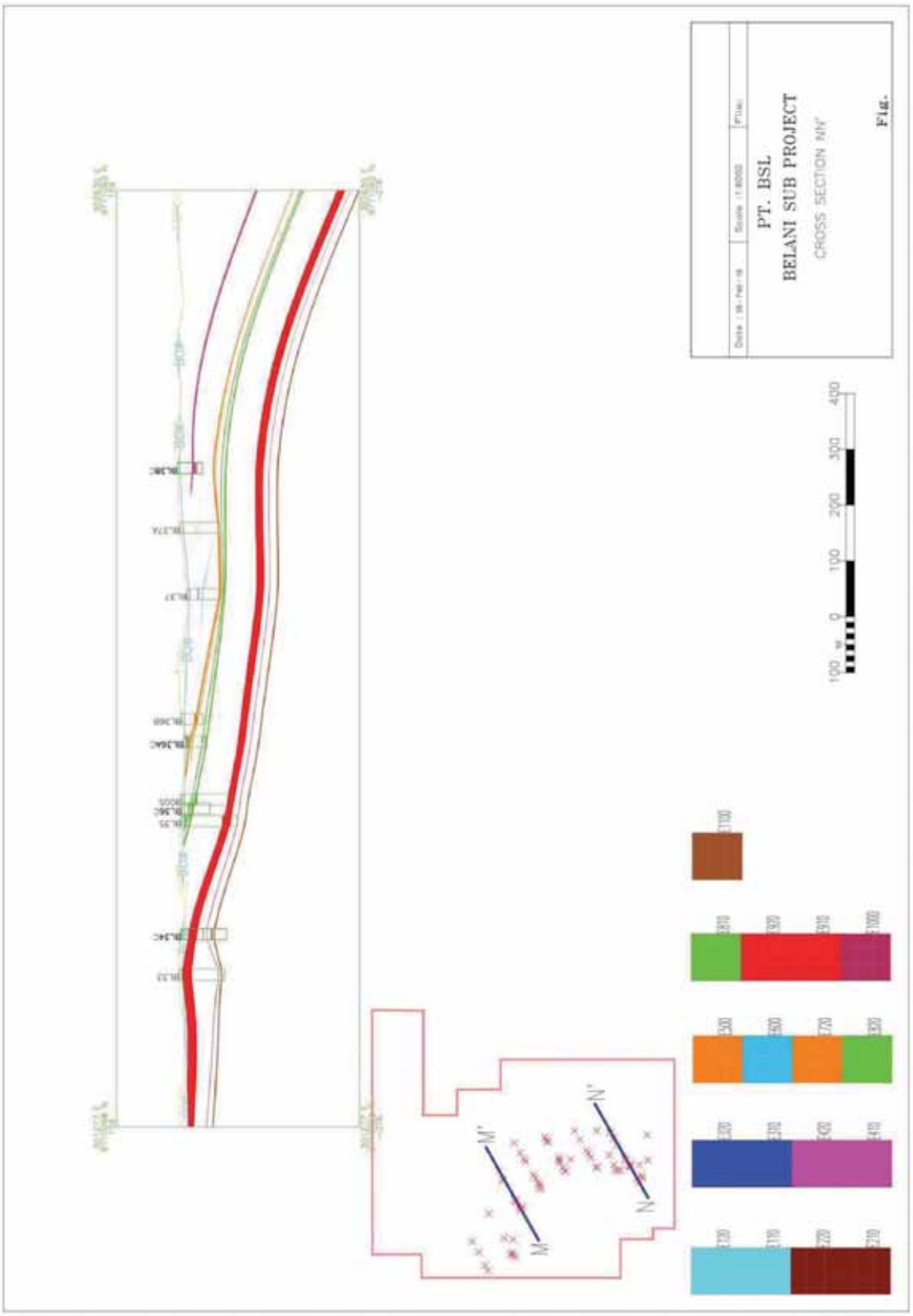

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
BLx01
BLx02
BLx03
BLx04
BLx09
BLx10
BLx16
BLx18
BLx19
BLx20A
CKBL3
BLx29
BLx30
CKBL4
B009
TP06
LEGEND
Drillholes
PT. BSL Belani Boundary
1000 200 400
PT. BSL
BELANI SUB PROJECT
BOREHOLE PLAN

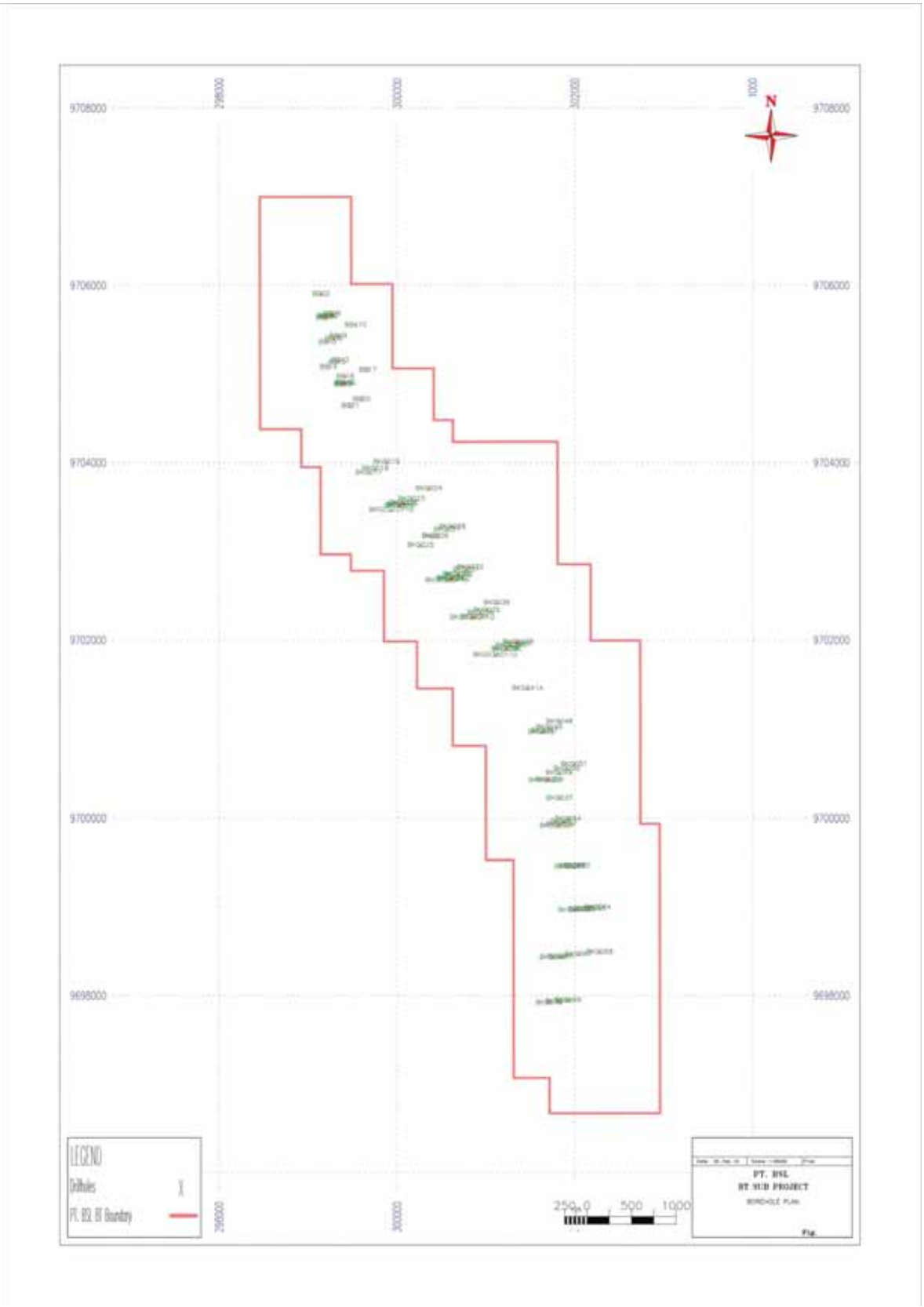

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
PT. BSL Belani Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
1000 200 400
PT. BSL
BELANI SUB PROJECT

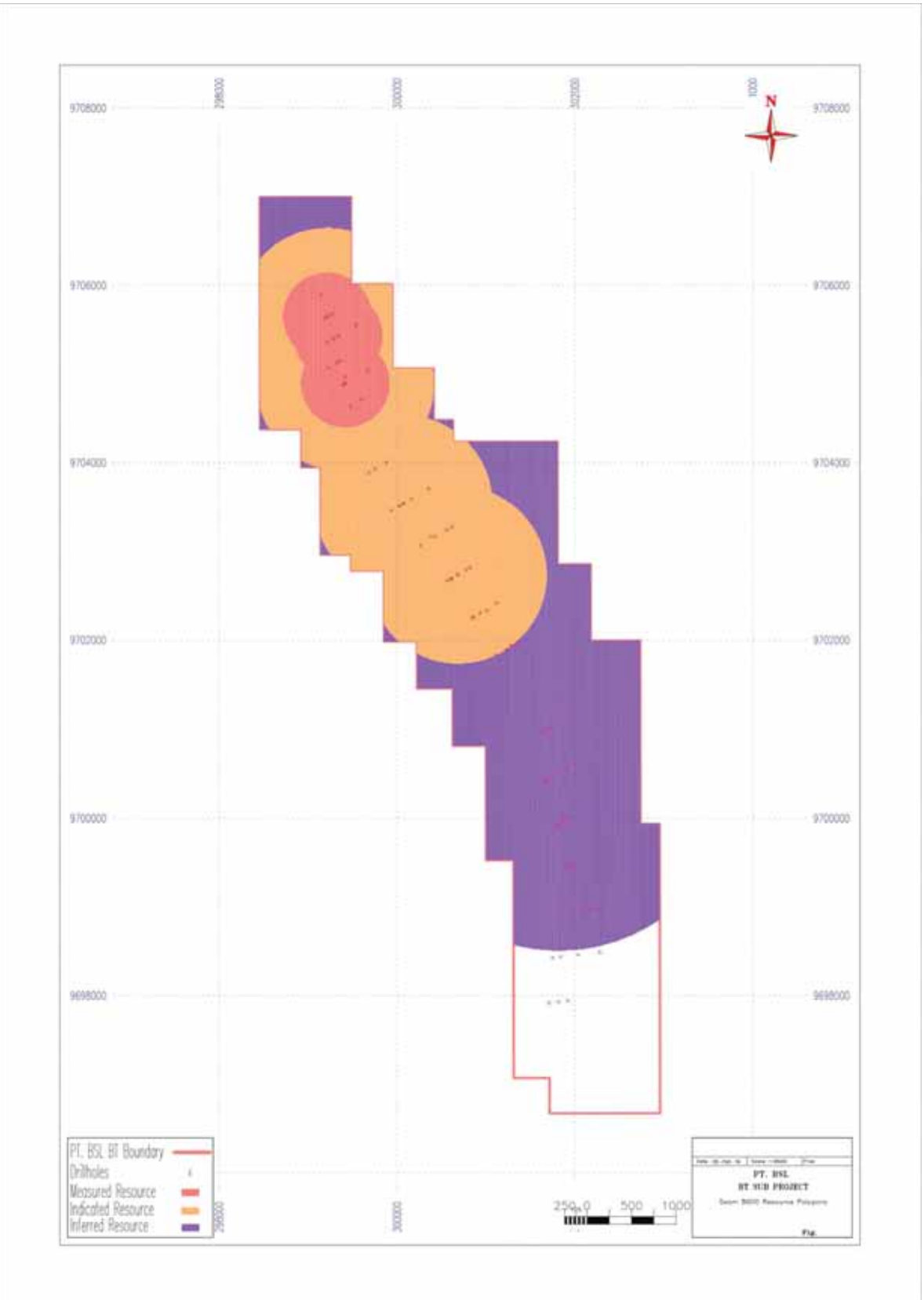

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
PT. BSL Belani Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
1000 200 400
PT. BSL
BELANI SUB PROJECT

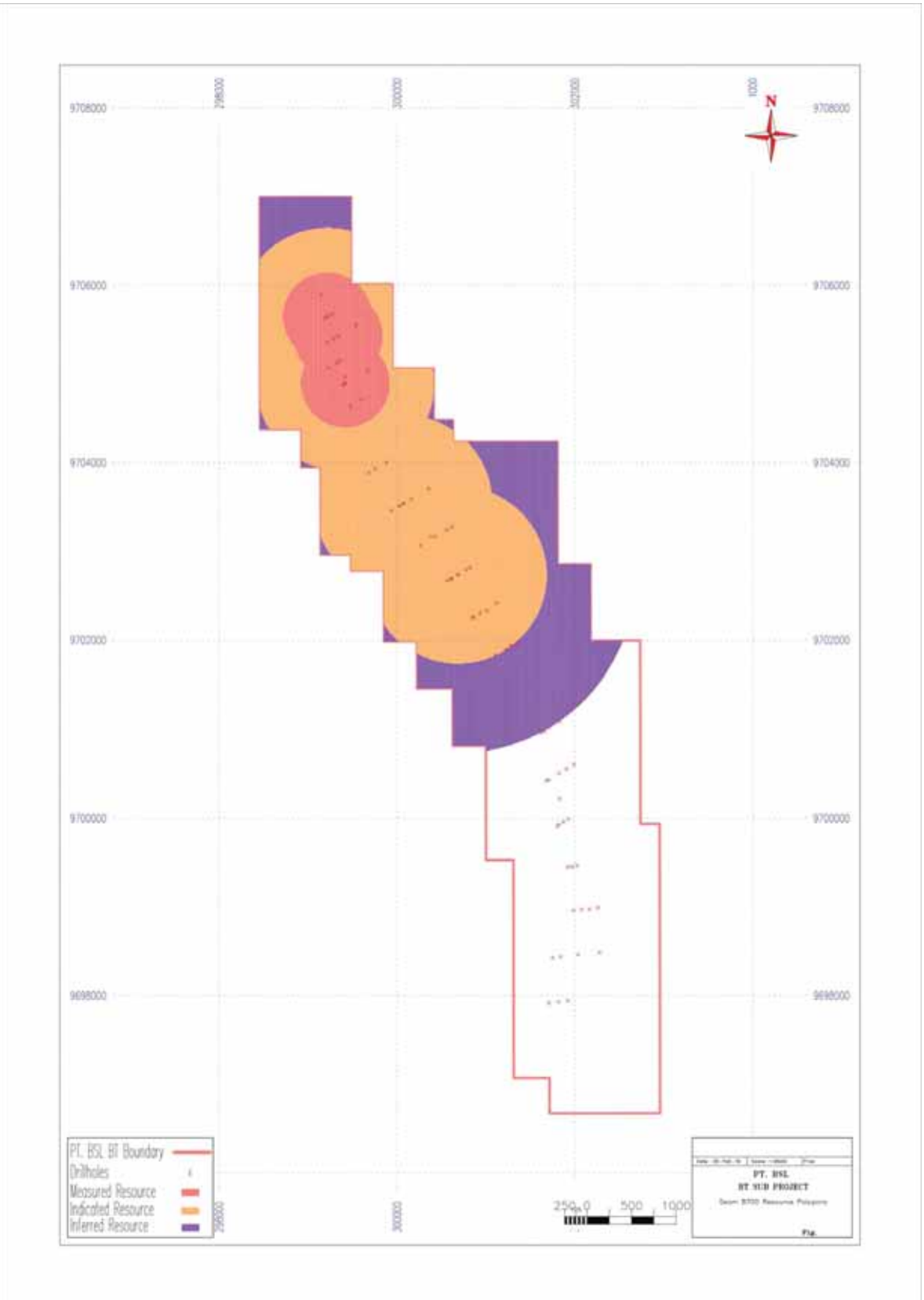

9716000
9715000
9714000
9713000
9712000
9711000
9710000
301000
302000
303000
N
PT. BSL Belani Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
1000 200 400
PT. BSL
BELANI SUB PROJECT

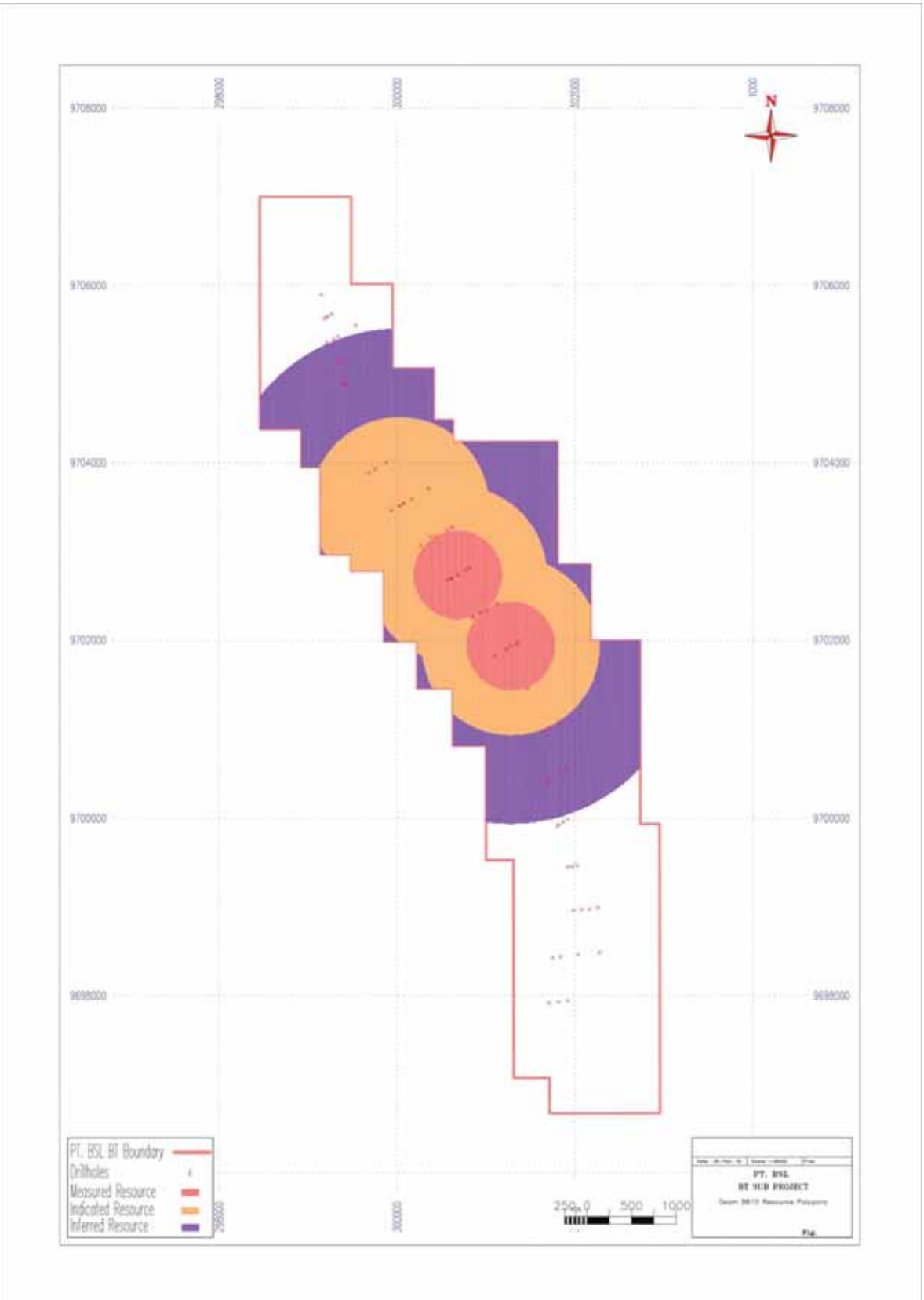

PT. BSL
BELANI SUB PROJECT
CROSS SECTION M-M'
Fig.
M
M'
N
N'

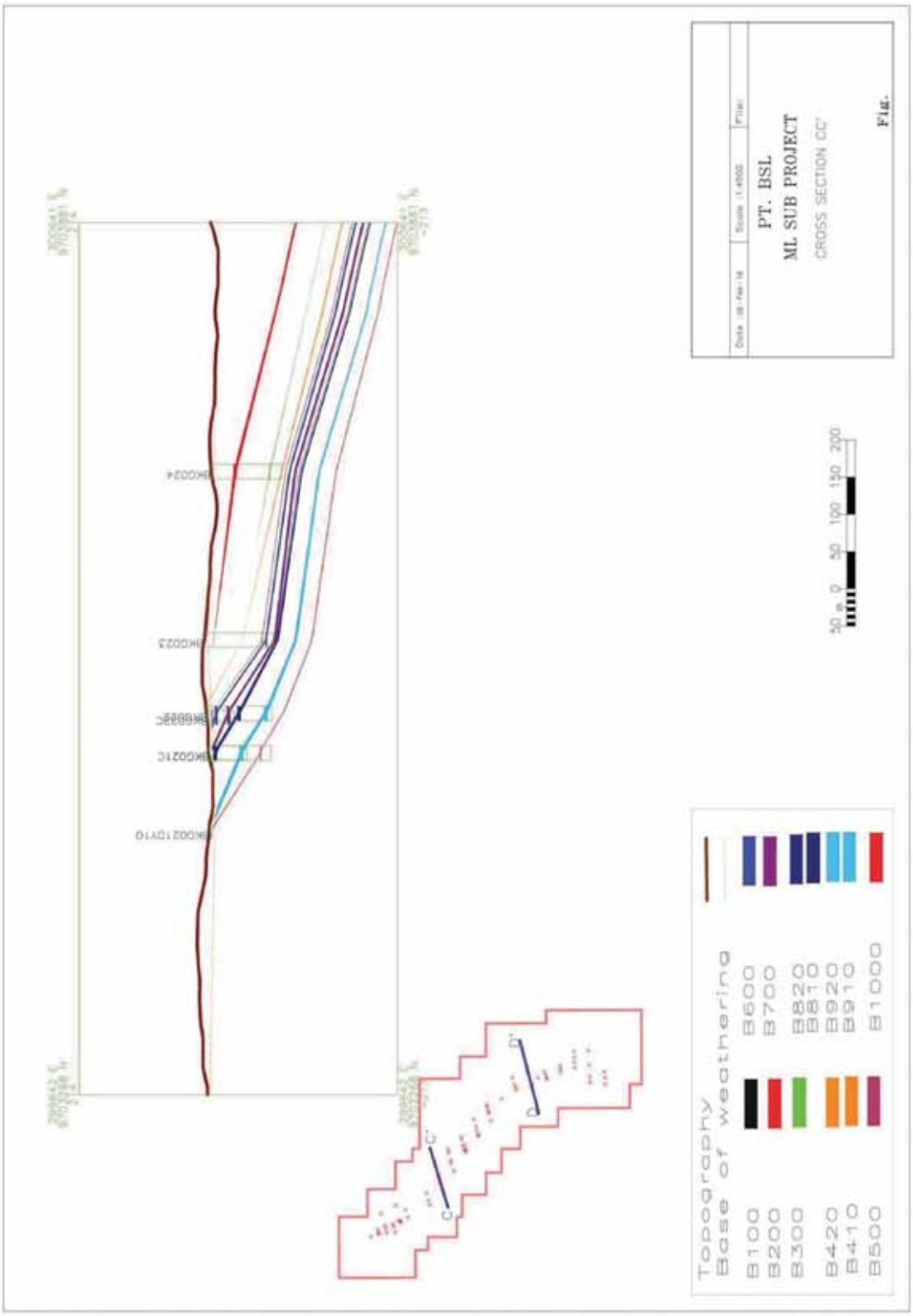

PT. BSL
BELANI SUB PROJECT
CROSS SECTION NN'
Fig.
M'
M
N'
N

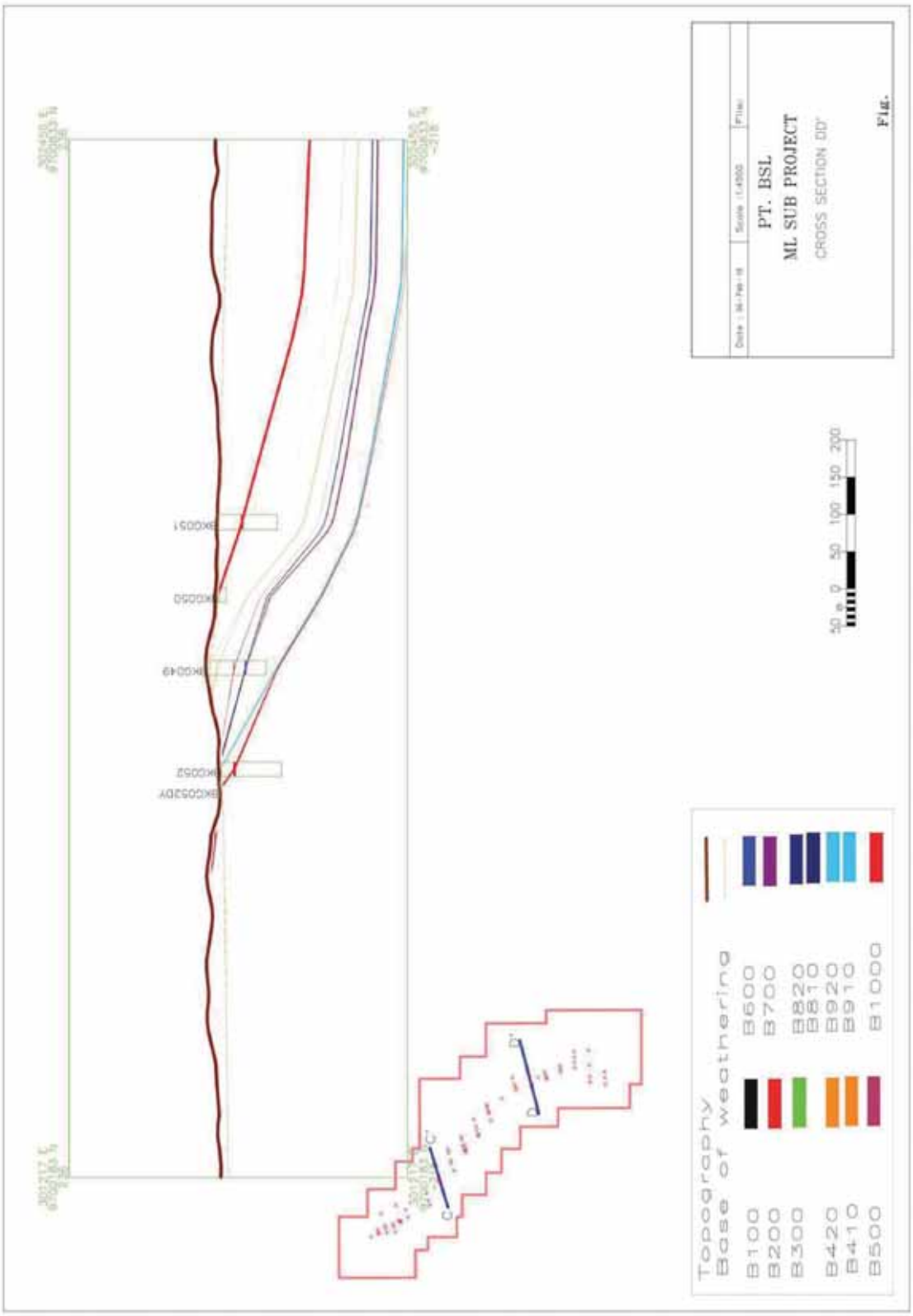

9708000
9706000
9704000
9702000
9700000
9698000
298000
300000
302000
N
LEGEND
Drillholes
PT. BSL IUP Boundary
0
500
1000
PT. BSL
BT NUD PROJECT
BOREHOLE PLAN


9708000
9706000
9704000
9702000
9700000
9698000
298000
300000
302000
N
PT. BSL BT Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
0 500 1000
PT. BSL
BT SUB PROJECT


9708000
9706000
9704000
9702000
9700000
9698000
298000
300000
302000
N
PT. BSL BT Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
250 0 500 1000
PT. BSL
BT SUB PROJECT


9708000
9706000
9704000
9702000
9700000
9698000
295000
300000
302000
1000
N
PT. BSL BT Boundary
Drillholes
Measured Resource
Indicated Resource
Inferred Resource
250 0 500 1000
PT. BSL
BT NUD PROJECT


PT. BSL
ML SUB PROJECT
CROSS SECTION CC'
Fig.
Topography
Base of weathering
B100
B200
B300
B420
B410
B500
B600
B700
B820
B810
B920
B910
B1000
C
C'
D
D'


PT. BSL
ML SUB PROJECT
CROSS SECTION DD'
Fig.
Topography
Base of weathering
B100
B200
B300
B420
B410
B500
B600
B700
B820
B810
B920
B910
B1000
0
50
100
150
200
C
C'
D
D'

SALVA
Mining Consultants

Golden Energy and Resources Ltd.

PT Bara Sentosa Lestari Project ("BSL")

Independent Qualified Person's Report - South Block
Part 2 – Mineral Asset Valuation

14 February 2018

Golden Energy and Resources Ltd.

PT Bara Sentosa Lestari Project ("BSL")

Independent Qualified Person's Report – South Block

Part 2 – Mineral Asset Valuation

Salva Mining Pty Ltd

300 Adelaide Street, Brisbane, QLD 4000, Australia
Email: inf@salvamining.com.au
Website: www.salvamining.com.au
Phone: +61 (0) 407 771 528

Effective Date: 31 December 2017

14 February 2018

Independent Expert Person:

Manish Garg
BEng (Hons), Master of Applied Finance
MAusIMM, GAICD
Director, Salva Mining Pty Ltd

SALVA
Mining Consultants

Table of Contents

Executive Summary **12**

1 Introduction **19**

1.1 Scope 19

1.2 Data Sources 19

1.3 Disclaimer and Warranty 19

2 Independent Competent Person and Expert Statement **21**

2.1 Statement of Independence & Fees 21

3 Project Description **22**

3.1 Property Description and Access 22

3.2 Ownership and Concession 24

3.3 Tenure 24

4 Coal Resources & Reserves **25**

4.1 Coal Resource 25

4.2 Resource Classification 25

4.3 Coal Resource Statement 26

4.4 Coal Reserves 27

4.5 Estimation Methodology 27

4.6 Modifying Factors 27

4.7 Reserves Classification 28

4.8 Statement of Coal Reserves 29

5 Mining Schedule **30**

5.1 Mine Schedule 32

5.2 Mining Operations 33

5.3 Top Soil Removal 34

5.4 Drilling and Blasting 34

5.5 Waste Excavation 34

5.6 Dewatering 35

6 Coal Handling and Coal Logistics **36**

6.1 Southern Connection – Coal transport by River 36

SALVA Mining Consultants

6.2 Northern Connection – Coal transport by Road & then Barge 38
6.3 Summary of Logistics Options 39
7 Environment and Community Relations 43
7.1 Environmental Aspects 43
7.2 Water Run-off from site 43
7.3 Noise and Dust 43
7.4 Rehabilitation 43
7.5 Hydrocarbon Management 43
7.6 Community and Sustainability 44
7.7 AMDAL 44
8 Valuation 45
8.1 Valuation Approaches 45
8.2 Valuation Approach for Assessing the BSL Mine 45
9 Economic Parameters 46
9.1 Royalty and Local Government Fees 46
9.2 Inflation Outlook 47
9.3 Corporate Income Tax 47
9.4 Depreciation and Amortisation 48
9.5 Working Capital 48
9.6 Carried Forward Tax Losses 48
9.7 Value Added Tax 48
9.8 Weightage Average Cost of Capital (WACC) 49
10 Market Analysis and Coal Prices 50
10.1 Seaborne Thermal Coal Demand 50
10.2 Asian Thermal Coal Demand 51
10.3 Seaborne Thermal Coal Supply 52
10.4 Indonesian Coal Supply 53
10.5 Domestic Power Demand 54
10.6 Domestic Coal Demand 56
10.7 Coal Demand in South Sumatra Region 57
10.8 Thermal Coal Benchmark Price Forecast 60

SALVA Mining Consultants

10.9 BSL Coal Price Used for Project Assessment 61

11 Capital Cost 64

11.1 Basis of Estimation 65

11.2 Land Acquisition 65

11.3 Haul Road Upgrade 65

11.4 Port Stockpile and Jetty 66

11.5 Other Cost Items 66

11.6 Mine Reclamation 66

11.7 Exclusions 66

11.8 Capital Phasing 67

12 Operating Cost 68

12.1 Method of Estimation 68

12.2 Items included in the Operating Cost Estimates 68

12.3 Contractor Costs 69

12.4 Owner Costs 69

12.5 VAT 70

12.6 Royalties and Government Costs 70

12.7 Overall Operating Cost 70

13 Financial Analysis & Project Valuation 72

13.1 Modelling Methodology & Considerations 72

13.2 Base or Preferred Case 72

13.3 Valuation Range 76

13.4 Second Valuation Approach – Market Comparable Transaction Method 77

14 Valuation Summary 81

14.1 Previous Valuation 81

15 Risk Factors & Opportunities 82

15.1 Project Risks 82

15.2 Key Opportunities 85

References 86

Appendix A – CVs 87

Appendix B: SGX Mainboard Appendix 7.5 88

SALVA
Mining Consultants

Appendix C – Resource & Reserve Report 89

List of Figures

Figure 3:1 General Location Plan 22
Figure 3:2 Tenement Boundary & Location of Individual Coal Blocks 23
Figure 4:1 General relationships between Mineral Resources & Ore Reserves 28
Figure 5:1 Inferred Resources within optimized pit shell 31
Figure 5:2 Life of Mine Schedule 33
Figure 5:3 Mining Operations – BL Block 33
Figure 5:4 LOM Waste Excavations 35
Figure 6:1 Overview - Coal Transport by River 36
Figure 6:2 Coal Transport by River 37
Figure 6:3 Location of Ports and Bridges on Musi River 38
Figure 6:4 Coal Transport by Road from Belani Pit to Gorby Port 41
Figure 6:5 Coal Transport by Road from Muara Lakitan to Gorby Port 42
Figure 10:1 Seaborne Thermal Coal Market 50
Figure 10:2 Distribution of Global Coal Consumption 50
Figure 10:3 Per Capita Electricity Consumption 51
Figure 10:4 Asian Thermal Coal Import Outlook 52
Figure 10:5 Seaborne Thermal Coal Exporters 52
Figure 10:6 Asia Pacific Basin Seaborne Thermal Coal Export Outlook 53
Figure 10:7 Recent Trend in coal production and Exports from Indonesia 54
Figure 10:8 Indonesia - Power Demand Outlook 55
Figure 10:9 35GW Power Generation Program 55
Figure 10:10 Indonesia - Power Demand Outlook 56
Figure 10:11 Indonesia - Domestic Thermal Coal Demand Outlook 57
Figure 10:12 List of Mine-Mouth Power Plant Proposals as of June 2016 58
Figure 10:13 Planned Electricity Network, South Sumatra 59
Figure 10:14 Thermal Coal Prices 60

Figure 13:1 Cash Streams – Preferred Case 74
Figure 13:2 Discounted Cash Flow Profile 75
Figure 13:3 Key Project Sensitivities 75

List of Tables

Table 3:1 BSL Concession Details 24
Table 4:1 Coal Resources, BSL Mine, 31 December 2017 26
Table 4:2 Modifying & Mine Optimisation Factors 27
Table 4:3 Coal Reserves, BSL Mine as on 31 December 2017 29
Table 5:1 LOM Schedule, Inferred Resources within optimized pit shell 32
Table 6:1 Road Logistics 39
Table 6:2 Logistics (Mt) over Life of Mine 40
Table 8:1 Typical Valuation Methods 45
Table 9:1 Indonesian Coal Royalty Rates 46
Table 9:2 Corporate Tax Rates 48
Table 9:3 WACC (After Tax) 49
Table 9:4 WACC for Indonesian Coal Mining Companies 49
Table 10:1 Asian Seaborne Thermal Coal Demand 51
Table 10:2 Asia-Pacific Seaborne Thermal Coal Supply 53
Table 10:3 Indonesia Power Generation – Energy Source 56
Table 10:4 Thermal Coal (Newcastle Coal Index) Price Outlook 61
Table 10:5 Coal Price Discount/premium, (% to Adaro Ecocoal) 62
Table 10:6 Coal Price Forecast, US $/t 62
Table 11:1 Capital Cost (Real Terms) 64
Table 11:2 Capital Cost Phasing (US $M, Real Terms) 67
Table 12:1 Contractor Unit Rates (Real Terms) 69
Table 12:2 Variable Owner Unit Costs (Real Terms) 70
Table 12:3 Average Unit Operating Cost (Real Terms) over Life of Mine 71
Table 13:1 Preferred Case – Key Input Parameters 72

Table 13:2 Preferred Case – Financial Model 73
Table 13:3 Preferred Case – Financial Outputs & Valuation 74
Table 13:4 Project Sensitivity 76
Table 13:5 Valuation Range - Input Parameters 76
Table 13:6 Sensitivity - NPV 76
Table 13:7 Valuation Range – Income Based Approach 77
Table 13:8 Market Comparable Transactions 78
Table 13:9 Market Based Valuation Range 80
Table 14:1 Valuation Summary – BSL Project, 100% Basis 81
Table 14:2 Valuation - Comparison with Previous Estimate 81

SALVA Mining Consultants

Key Abbreviations

0	Degrees
$ or USD	United States Dollar
adb	Air dried basis, a basis on which coal quality is measured
AMSL	Above Mean Sea Level
AMDAL	Analisis Mengenai Dampak Lingkungan Hidup- Environmental Impact Assessment (EIA), which contains three sections, the ANDAL, the RKL and the RPL
ANDAL	Analisis Dampak Lingkungan Hidup, component of the AMDAL that reports the significant environmental impacts of the proposed mining activity
Ar	As received basis
ASR	Average stripping ratio
AusIMM	Australasian Institute of Mining and Metallurgy
Batter	Slope of Advancing Mine Strip
bcm	bank cubic meter
BD	bulk density
CHPP	Coal Handling and Processing Plant
CV	Calorific value
Capex	Capital Expenditure
Coal Resource	A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
Coal Reserve	A 'Coal Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.
DCF	Discounted cash flow
DGMC	Directorate General of Minerals and Coal within the Ministry of Energy and Mineral Resources
FC	Fixed Carbon
gar	gross as received, a basis on which coal quality is measured

GCV	Gross Calorific Value, "The Gross Calorific Value of coal is the amount of heat produced by its complete combustion of its unit quantity." It is usually expressed in kcal/kg unit.
GEAR	Golden Energy and Resources Ltd.
ha	Hectare(s)
HGI	Hardgrove Grindability Index
IM	Inherent Moisture
IPPKH	'Izin Pinjam Pakai Kawasan Hutan' which translates to a borrow to use permit in a production forest
IRR	Internal Rate of Return
IUP or IUPOP	'Izin Usaha Pertambangan' which translates to 'Mining Business License'
JORC	2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, Australian Institute of Geoscientists and Mineral Council of Australia
K	Thousand
kcal/kg	Unit of energy (kilocalorie) per kilogram
Kg	Kilogram
km	Kilometers(s)
km^2	Square kilometre(s)
kV kilovolt	kV kilovolt
M	Meter
lcm	loose cubic metre
LOM	Life of Mine
M	Million
Mbcm	Million bank cubic metres
Mbcmpa	Million bank cubic metres per annum
MEMR	Ministry of Energy and Mineral Resources within the central government
m RL	metres reduced level
m^3	cubic metre
Mt	Millions of tonnes
Mtpa	Millions of tonnes per annum
MW	Megawatt
NAR	Net as received
NPV	Net present value
NTA	Net tangible assets
Opex	Operating expenditure
PKP2B	'Perjanjian Kerjasama Pengusahaan Pertambangan Batubara' – same as CCoW
RD	Relative density
RKL	'Rencana Pengelolaan Lingkungan' - environmental management plan
ROM	Run of Mine

RKL	Relative Level - survey reference for height of landforms above a datum level
RPL	'Rencana Pemantauan Lingkungan' - environmental monitoring plan
Salva Mining	Salva Mining Pty Ltd.
SE	Specific Energy
SR	Strip ratio (of waste to ROM coal) expressed as bcm per tonne
T	Tonne
tkm	Tonne kilometre
tph	Tonnes per hour
tpa	Tonnes per annum
TM	Total Moisture (%)
TS	Total Sulphur (%)
VALMIN	2015 Edition of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports
VM	Volatile Matter (%)
WACC	Weighted Average Cost of Capital

SALVA
Mining Consultants

Executive Summary

Introduction

Golden Energy and Resources Ltd. ("GEAR" or "Client") has engaged Salva Mining Pty Ltd ("Salva Mining") to prepare an Independent Qualified Person's Report ("Report") including mineral asset valuation and of the Southern Block of Bara Sentosa Lestari Project ("BSL Mine" or "BSL Project") located in South Sumatra, Indonesia.

The Qualified Person's Report is part of the work completed by GEAR as part of potential acquisition of these assets and is planned to be presented to the company's shareholders as part of continuous disclosure requirements of the company. The independent valuation has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code 2015). The effective date of valuation is the 31 December 2017.

The South Block of Barasentosa Lestari Project ("BSL Project") is located in the Musi Rawas Utara and Musi Rawas Regencies, South Sumatra, Indonesia. The BSL Project area is located almost equidistant (200 - 250 km by road) from the major cities of Sumatra Island, namely Palembang and Bengkulu.

BSL Project

The BSL Project consists of two sub-blocks, namely north and south blocks, covering a total area of 23,300 Ha. Exploration to date has concentrated on the South Block (~ 3200 Ha) where four sub-blocks prospective for coal have been identified:

- Muara Lakitan (ML);
- Batukucing (BK);
- Belani (BL); and
- Ampalau.

Coal Resource and Reserves have been delineated at ML, BK and BL Blocks. The BSL coal deposit is a part of the coal deposits held through Generation II Coal Contract of Work (CCoW) and is currently in the advanced development stage.

Coal Resources

Salva Mining have estimated total Coal Resources of 393 million tonnes (Mt) on an in-situ air dried moisture basis, to a maximum depth of 150 m. The total tonnes are comprised of 175 Mt of Measured, 144 Mt of Indicated and 74 Mt of Inferred Resources.

BSL Coal Resources as at 31 December 2017

Resource Classification	Mass (Mt)	TM (adb) (%)	IM (adb) (%)	Ash (adb) (%)	Volatile Matter (adb) %	Total Sulphur (adb) %	GCV (adb) kcal/kg	Relative Density (adb)
Measured	175	35.3	19.8	5	38.7	0.3	5,055	1.37
Indicated	144	33.3	18.8	4.9	38.9	0.3	5,236	1.37
Inferred	74	34.9	18.1	6.8	38.5	0.4	5,112	1.40
Total	393	34.5	19.1	5.3	38.7	0.3	5,132	1.38

(*Note: individual totals may differ due to rounding*)

SALVA Mining Consultants

Coal Reserves

An independent estimate of the Reserves within the BSL concession was prepared by Salva Mining. Coal Resources have been estimated, classified and reported according to the JORC Code (2012). Salva Mining prepared the Coal Reserve estimate as at 31 December 2017 on the basis for the Coal Resource estimate as at that date after application of appropriate modifying factors.

BSL Project Coal Reserves as at 31 December 2017

Concession	Coal Reserve (Mt)			RD, adb t/m3	TM, arb %	IM adb %	Ash, adb %	CV, arb Kcal/kg	TS, adb %
	Proved	Probable	Total						
Muara Lakitan	109.8	31.3	141.1	1.38	36.8	20.9	5.0	3,977	0.30
Batukucing	1.7	11.5	13.1	1.42	33.6	9.9	5.4	4,369	0.45
Belani	18.8	21.6	40.4	1.33	28.2	19.5	4.8	4,596	0.29
Total	**130.3**	**64.4**	**194.6**	**1.37**	**34.8**	**19.9**	**5.0**	**4,132**	**0.31**

Coal Resources are reported inclusive of Coal Reserves. The coal will be sold as a run of mine (ROM) product; hence Marketable Reserves will equal Coal Reserves.

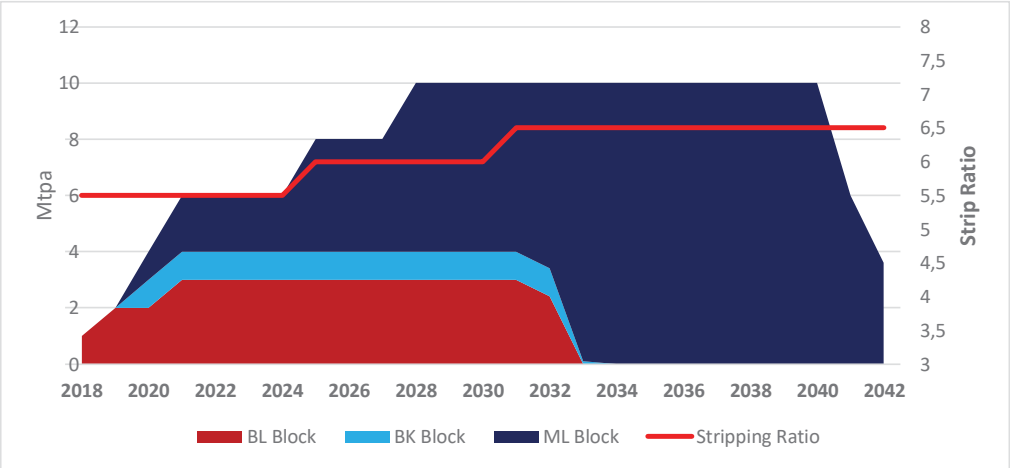
The average predicted product coal quality based on the total Coal Reserves is Total Moisture TM (ar) 34.8%, Ash (adb) 5.0%, CV (gar), 4,132 Kcal/Kg and sulphur content 0.3%.

Life of Mine Schedule

As per preliminary production schedule, the minable tonnes over life of mine is estimated to be 194.6 Mt, requiring waste mining of 1,207 Mbcm. The LOM stripping ratio is estimated to be at 6.2 bcm/t of coal mined. The schedule includes production of 1 Mt for 2018, 2 Mt in 2019, and then increasing to 6 Mt by year 4 onwards with peak production of 10 Mt for all three pits combined together.

Pre-production activities from BL block has commenced, while production from BK and ML Blocks is expected to commence from 2020 onwards.

Life of Mine Schedule



Mining at BSL Mine is proposed to be by contract operators. The company will deploy management persons for critical areas, manage site infrastructure and coal evacuation logistics only.

Logistics

Detailed logistics options studies for transporting coal from Muara Lakitan, Batukucing and Belani deposits by river (barges). Further work to assess road haulage was assessed in 2016.

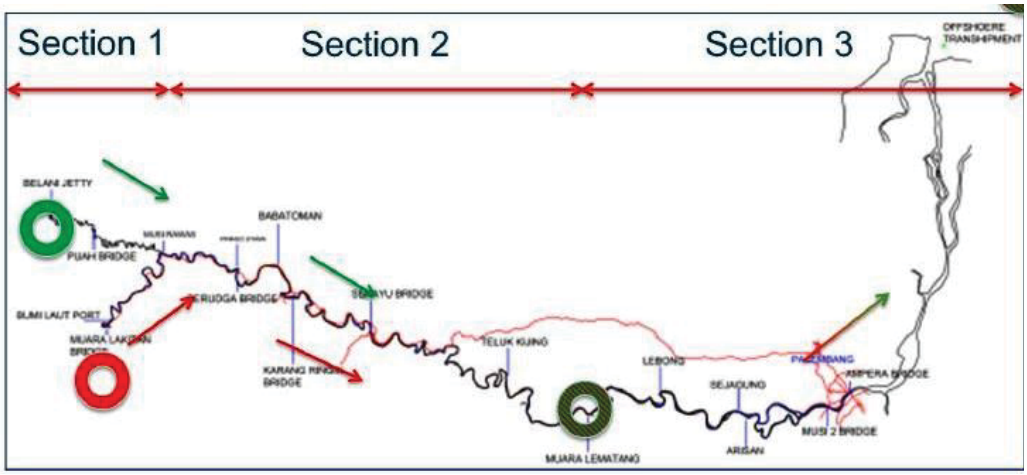
Two viable logistic routes were identified:

- Southern Barging Route; and
- Northern Road and Barge Route.

In the Southern barging option, it is planned that the coal from predominately Muara Lakitan (ML) Pit along with some coal output from Batukucing Pit will be transported on the Musi River. Coal from the Muara Lakitan Jetty (ML Jetty) is planned to be barged through Musi river by barges up to 2000t capacity to the intermittent stockpile at Muara Lematang located downstream on the Musi River. A barge loading terminal is currently under construction at Muara Lakitan, including a 700tph barge loading conveyor.

Coal from the Batukucing Pit (and potentially Belani Pit) will be barged on the Rawas River via the confluence with Musi River to the intermittent stockpile at Muara Lematang located along the Musi River.

Southern Logistics Route – River Barging



The river logistic study determined that the Maximum barging capacity is governed on both upstream sections of the narrow bends, sharp bends and narrow sections, which limits the export capacity of both mines to about 3 million m3 which is approximately 4.2 Mt assuming density of 1.4 t/m3. For the purpose of this valuation, Salva Mining has opted to be conservative and assumed maximum capacity of 4 Mtpa only.

In the Northern Road option, it is proposed to transport coal from Belani and Batukucing pits by road to the Gorby Port which is located north east of PT. BSL concession.

Coal will transport of ~130km from the Belani pit and ~170km from Muara Lakitan pits by road to the Gorby Port. There are local roads (govt/village roads) available along with dedicated private haulage road from the pits to the Gorby Port which needs to be upgraded to carry proposed peak production capacity. Coal from Belani Pit is proposed to be transported using this Northern Road Option.

Capital and Operating Cost

The overall estimated capital cost for the project (including land compensation for life of mine and contingency) is as follows:

Capital Cost (Real Terms)

Sr. No.	Particulars	Direct Cost ($M)	Contingency ($M)	Total Cost ($M)
1.1	Land Compensation	6.96	1.04	8.00
1	Land Compensation	6.96	1.04	8.00
2.1	Workshop, Office and Laboratory	1.10	0.17	1.27
2.2	Backup Power Generation	0.40	0.06	0.46
2.3	Coal Handling Equipment	1.00	0.15	1.15
2.4	Accommodation Camp	1.00	0.15	1.15
2.5	Fuel Storage	0.80	0.12	0.92
2.6	Water Supply and Sewage System	0.50	0.08	0.58
2.7	Communications	0.50	0.08	0.58
2	Mine Infrastructure	5.30	0.80	6.10
3.1	Road Upgrade Mine to Port	8.00	1.20	9.20
3.2	Port Stockpile and Jetty	5.00	0.75	5.75
3	Road & Port Facilities	13.00	1.95	14.95
0	**Total Project Cost**	**25.26**	**3.79**	**29.05**

Salva Mining estimated total operating costs for mining and other activities including coal hauling, barging and port handling charges. At this level of study these estimates are considered reasonable. The cost components are given in Table below.

Average Unit Operating Cost (Real Terms) over Life of Mine

Cost Item	$/t
Land Clearing	0.01
Waste Mining	10.54
Waste Haulage	0.32
Coal Mining	0.75
Haul to Inter. Stockpile - Road	7.29
Haul to Inter. Stockpile - Small Barge	4.36
Unloading (smaller Barge)	0.10
Stockpile and Large Barge Loading	0.75
Mine Closure	0.03
Environmental and Rehabilitation	0.20

Cost Item	$/t
Salary and Wages	0.20
Corporate Overheads	0.40
Local Government Fees	0.20
VAT	2.25
Operating Cost Excl. Royalty	**27.40**
Royalty	4.22
Operating Cost Incl. Royalty	**31.62**

The unit operating costs are reasonable when compared to industry standards by Salva Mining.

Price Outlook

The global seaborne thermal coal market has grown significantly over the last six years from around 720 million tonnes (Mt) in 2010 to 919 Mt in 2016, registering a compounded annual growth rate (CAGR) of 4.2%. Asian trade in the thermal coal market has increased significantly during the same period growing from 526Mt in 2010 to 707 Mt in 2016, registering an impressive compound average growth rate (CAGR) of 7%. This growth in Asian thermal coal demand has been driven primarily by significant increases in coal-fired electricity generation capacity, as coal is a less expensive source of energy than other fuels particularly in Asia. The next phase of Asian growth in electricity demand is expected to come from Southeast Asian economies which is expected to drive the seaborne coal demand to 835 Mt in 2025.

On the supply side, exporters are expected to finally derive benefits from the growing price environment. Indonesia and Australia is expected to grow more than other supply center because of its proximity of key Asian Markets.

Within Indonesia, coal will continue to play a vital role in development of power generation in Indonesia for the next ten years due to the relatively lower costs of construction and operation. Mine-mouth power plants (power plants near coal mines) remain integral to the plan, given Indonesia's large lignite coal deposits are often located in remote areas with minimal infrastructure, making transportation of the coal uneconomic. Moving forward, the domestic thermal coal demand in Indonesia is expected to grow at CAGR of 6.8% to 149 Mt by 2025 from 85 Mt in 2016.

It is proposed that the ROM coal mined from the BSL Project will be sold at the River Jetty for use in domestic coal fired power plants. Salva Mining has been advised that PT. BSL has signed coal sales agreement (MOU) whereby the coal will be sold at Palembang Lago Coal Terminal /Gorby Port at price as determined by the HPA/HPB Indonesian coal Index. The coal will be priced on the basis of quality parameters and the gross calorific value of ROM coal on long term contract arrangement.

To estimate the long-term price for the BSL Mine, Salva Mining has adopted the latest brokers and analyst forecast for thermal coal prices ex Newcastle ($/t, FOB) as a benchmark thermal coal price. The data which was collected by Consensus Economics Inc. in December 2017, included forecasts of future prices for coal of CV 6,322 kcal/kg (gar). Salva Mining has adopted an average of forecast prices as a reasonable benchmark price.

The quality of the BSL Coal is expected to be similar to that marketed by PT. Adaro Energy, Tbk ("Adaro") as Ecocoal, albeit a slightly bit lower CV (average of 1.4% lower than Ecocoal). Therefore, in Salva Mining's opinion, BSL coal should trade at a slight discount to price of Adaro's Ecocoal mainly because of a slightly lower CV. To determine long term price outlook for the BSL coal, Salva Mining has first determined the long-term price outlook for the Adaro's Ecocoal and the price of LRC coal, which was determined from Adaro's Ecocoal price on the basis of pro-rata energy differentials. The projected price for the BSL Mine coal is shown in Table below.

Coal Price Forecast, US $/t (Real Terms)

	2018F	2019F	2020F	2021F	2022F	Long Term
Newcastle Coal Index	79.4	71.3	66.1	64.4	62.9	63.5
Adaro's Eco Coal	45.2	40.7	37.7	36.7	35.9	36.2
ML Coal	42.8	38.5	35.7	34.8	34.0	34.3
BK Coal	47.1	42.3	39.2	38.2	37.3	37.6
BL Coal	49.5	44.5	41.3	40.2	39.3	39.6

Salva Mining has assumed coal prices to remain constant in real terms from 2023 onwards.

Other Economic factors

Salva Mining applied appropriate economic and other factors, including VAT, corporate tax, depreciation etc. Discount rate used for determination of discounted cash flow and valuation was assessed as 11% WACC (after tax).

Project Valuation and Range

Salva Mining has assessed the value of the project on two approaches – Income Based (NPV) and market based (Comparable Transactions) approaches.

The preferred value derived from the Income based approach is within the acceptable range of the preferred value derived from comparable market transactions range. Salva Mining has used the average derived from these two approach as its opinion on the value of the BSL project.

Salva Mining has estimated the valuation of the BSL concession using the assumptions and inputs detailed in this report. Salva Mining's opinion of the technical value and thus the project value (on 100% basis) as at 31 December 2017 is shown in below, which takes into account the high and low cases and the sensitivity of the project.

Valuation Summary – BSL Project, 100% Basis

Item	Market Value (US $M)		
	Lower	Preferred	Upper
Valuation, Income Based	164	265	367
Valuation, Market Based	195	231	267
Valuation, Selected (BSL, 100% Project)	**180**	**248**	**317**

SALVA
Mining Consultants

Previous Valuation

The BSL South Project was previously valued in April 2017 by Salva Mining. The current valuation incorporates higher coal price forecast offset by a slightly more conservative production ramp up compared to the previous valuation.

Valuation - Comparison with Previous Estimate

Valuation Parameter	Unit	Salva Mining Dec-17 US$M	Salva Mining Apr-17 US$M
Coal Reserves	Mt	194.6	194.6
Average Coal Price	US$/t	35.74	35.09
Average Operating Cost (ex. Royalty)	US$/t	27.40	27.19
Average Cash Margin	US$/t	8.34	7.90
Discount Rate	%	11.0	11.0
Valuation – BSL South Project	US$M	**248**	**237**

SALVA
Mining Consultants

1 Introduction

Golden Energy and Resources Ltd. ("GEAR" or "Client") has engaged Salva Mining Pty Ltd ("Salva Mining") to prepare an Independent Qualified Person's Report ("Report") including mineral asset valuation for the South Block of Bara Sentosa Lestari Project ("BSL Mine" or "BSL Project") located in South Sumatra, Indonesia.

The Qualified Person's Report is part of the work completed by GEAR as part of potential acquisition of these assets and is planned to be presented to the company's shareholders as part of continuous disclosure requirements of the company. The independent valuation has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code 2015).

The effective date of valuation is the 31 December 2017, the date on which the Resource and Reserves that support this valuation were estimated.

1.1 Scope

Golden Energy and Resources Ltd. has requested that Salva Mining prepare an Independent Qualified Person's Report ("Report") for the South Block of Bara Sentosa Lestari Project ("BSL Mine" or "BSL") located in the Musi Rawas Utara and Musi Rawas Regencies in South Sumatra Province, Indonesia.

Part 1 of the report covers the coal resource and reserves for the South Block of BSL coal concession. Part 2 of this report covers the mineral asset valuation of the South Block of BSL coal concession only and not for the entire company which holds the assets.

1.2 Data Sources

This review is based on the information provided by Golden Energy and Resources Ltd., the technical reports of previous consultants and vendors, GMR Resources Ltd ("GMR"), as well as other published and unpublished data relevant to the project area.

Salva Mining has carried out its own independent assessment of the quality of the geological and mining data. Salva Mining relied on an Independent legal firm, Makes & Partners Law Firm 'MPL", a legal specialist that has carried out independent enquiry regarding the status of agreements, royalties or concession standing pertaining to the assets.

In developing our assumptions for this Statement, Salva Mining has relied upon information provided by the company and information available in the public domain. Key sources are outlined in this Report and all data included in the preparation of this Report has been detailed in the references section of this report. Salva Mining has accepted all information supplied to it in good faith.

Mr. Manish Garg, Director – Advisory / Partner conducted the visit to GEAR offices in Jakarta from 28 August 2017 to 1 September 2017 to review technical studies and commercial information. Dr. Ross Halatchev, Principal Consultant conducted the site visit to the BSL Mine on 6 October 2017.

1.3 Disclaimer and Warranty

This Report was commissioned by Golden Energy and Resources Ltd. on a fee-for-service basis according to Salva Mining's schedule of rates. Salva Mining's fee is not contingent on the outcome

of its valuation or the success or failure for the transaction for which the report was prepared. None of Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates have (or had) a pecuniary or beneficial interest in/or association with any of the Golden Energy and Resources Ltd., or their directors, substantial shareholders, subsidiaries, associated companies, advisors and their associates prior to or during the preparation of this report.

Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates are independent of Golden Energy and Resources Ltd., its directors, substantial shareholders, advisers and their associates.

A draft version of this report was provided to the directors of Golden Energy and Resources Ltd. for comment in respect of omissions and factual accuracy. As recommended in Section 39 of the VALMIN Code, Golden Energy and Resources Ltd. has provided Salva Mining with an indemnity under which Salva Mining is to be compensated for any liability and/or any additional work or expenditure, which:

- Results from Salva Mining's reliance on information provided by Golden Energy and Resources Ltd. and/or their Independent consultants that is materially inaccurate or incomplete, or
- Relates to any consequential extension of workload through queries, questions or public hearings arising from this report.

This report may contain or refer to forward-looking information based on current expectations, including, but not limited to timing of mineral Resource estimates, future exploration or project development programs and the impact of these events on the Golden Energy and Resources Ltd.

Forward-looking information is subject to significant risks and uncertainties, as actual results may differ materially from forecasted results. Forward-looking information is provided as of the date hereof and Salva Mining assumes no responsibility to update or revise them to reflect new events or circumstances.

The conclusions expressed in this report are as on the 31 December 2017, the date on which the Resource and Reserves that support this valuation were estimated. The valuation is only appropriate for this date and may change in time in response to variations in economic, market, legal or political factors, in addition to ongoing exploration results. All monetary values outlined in this report are expressed in US dollars ($) unless otherwise stated. Salva Mining services exclude any commentary on the fairness or reasonableness of any consideration in relation to these assets.

2 Independent Competent Person and Expert Statement

The independent valuation has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code 2015). This Mineral asset techno-commercial assessment and valuation in this report was prepared by, or under the supervision of Manish Garg (B.Eng. (Minerals Engineering), MAppFinance, MAusIMM, MAICD).

Mr. Garg, Director – Consulting / Partner and a full-time employee of Salva Mining has sufficient assessment and valuation experience, which is relevant to the activity he is undertaking to qualify as an Expert as defined in the 2005 Edition of the "Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports" (VALMIN Code 2015).

This report was prepared on behalf of Salva Mining by the signatory to this report, assisted by the subject specialists' competent persons whose qualifications and experience are set out in Appendix A of this report.

Mr. Manish Garg
Director – Consulting / Partner
Salva Mining Pty Ltd.

2.1 Statement of Independence & Fees

This Report was commissioned by Golden Energy and Resources Ltd. on a fee-for-service basis according to Salva Mining's schedule of rates which varies from USD 100/hr to USD 300/hr depending on the Consultant's skills and experience. Salva Mining's fee is not contingent on the outcome of its valuation or the success or failure for the transaction for which the report was prepared. The above mentioned person(s) have no interest whatsoever in the mining assets reviewed and will gain no reward for the provision of this techno-commercial assessment.

Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates are independent of Golden Energy and Resources Ltd., its directors, substantial shareholders, advisers and their associates.

None of Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates have (or had) a pecuniary or beneficial interest in/or association with any of the Golden Energy and Resources Ltd., or their directors, substantial shareholders, subsidiaries, associated companies, advisors and their associates prior to or during the preparation of this report.

SALVA
Mining Consultants

3 Project Description

3.1 Property Description and Access

The Bara Sentosa Lestari Project ("BSL Project") is located in the Musi Rawas Utara and Musi Rawas Regencies, South Sumatra, Indonesia (Figure 3:1). The BSL Project area is located almost equidistant (200 - 250 km by road) from the major cities of Sumatra Island, namely Palembang and Bengkulu.

Figure 3:1 General Location Plan

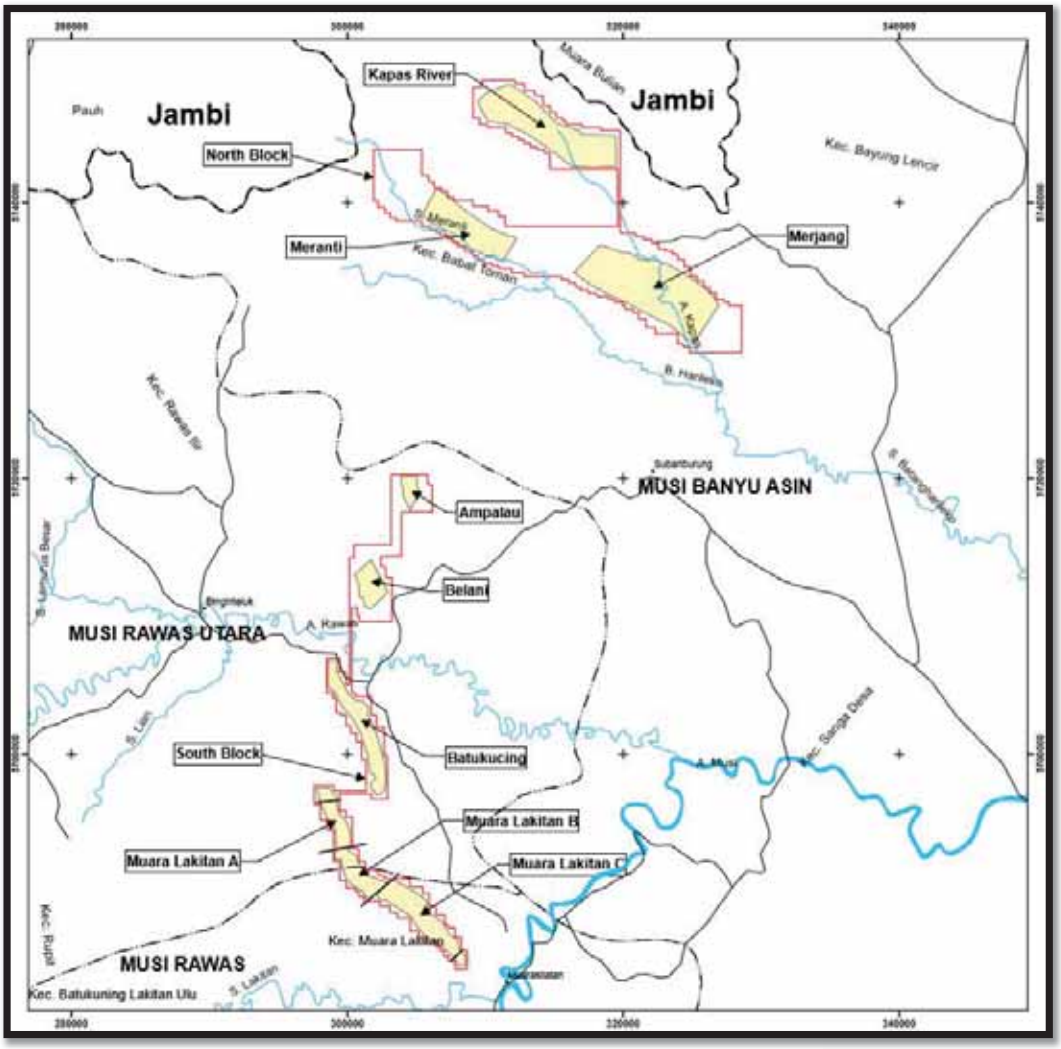
The BSL Project consists of two blocks, namely north and south blocks, covering a total area of 23,300 Ha. Exploration to date has concentrated on the South Block (~ 3200 Ha) where four sub-blocks prospective for coal (Figure 3:2) have been identified:

- Muara Lakitan (ML);
- Batukucing (BK);
- Belani (BL); and
- Ampalau.

The BSL coal deposit is a part of the coal deposits held through Generation II Coal Contract of Work (PKP2P: 015/PK/PTBA-BL/1994) and is currently in the advanced development stage. These coal deposits were previously held by PT. Duta Sarana Internusa and PT Banpu Public Company Limited before being acquired by PT. Barasentosa Lestari (PT. BSL).

SALVA
Mining Consultants

Figure 3:2 Tenement Boundary & Location of Individual Coal Blocks



Muara Lakitan (ML) is approximately 5 km north of the Musi River at its closest point and is approximately 400 km upstream from the offshore transhipment port at the mouth of the Musi River. Most of the exploration drilling had been carried out on Muara Lakitan during 2004-09 and a total of 36,100 m drilling was completed involving 452 boreholes. Muara Lakitan covers an area of approximately 3,200 Ha.

Batukucing Block (BS) covers an area of approximately 1,793 Ha. Batukucing is approximately 24 km north of the Musi River at its closest point and is approximately 400 km upstream from the offshore transhipment port at the mouth of the Musi River. Most of the exploration drilling had been carried out on BS Block during 2008-09.

Belani (BL) which covers an area of approximately 1,574 Ha is approximately 3 km north of the Rawas River at its closest point and is approximately 400 km upstream from the offshore

transhipment port at the mouth of the Musi River. Detailed exploration drilling was completed in 2009 at Belani North Block, and in 2010 at Belani South.

This Report only deals with the mineral asset valuation for the South Block which includes ML, BS and BL coal deposit.

3.2 Ownership and Concession

PT. Barasentosa Lestari is the holder of a mining concession pursuant to the Coal Contract of Work dated 15 August 1994 entered into between the Company and PT. Perusahaan Negara Tambang Batubara (as amended on 27 June 1999 and 14 November 2017) (the "CCoW"). The detail of the coal concession is given in Table 3:1.

Table 3:1 BSL Concession Details

Concession Number	Concession Type	Area (ha)	Status	Granted	Validity
015/PK/PTBA-BL/1994	Perjanjian Kerjasama Pengusahaan Pertambangan Batubara (CCoW)	23,300 ha	Granted	15-Aug-1994 Amended on 27 June 1997 & 14 November 2017	30 years

3.3 Tenure

Clause 67 of the VALMIN Code states that status of tenement is Material and requires disclosure. Determination of the status of Tenements is necessary and must be based on a recent independent inquiry, either by the Expert or a Specialist.

Makes & Partners Law Firm ("MPL"), a Jakarta based legal firm, was commissioned to prepare a report in respect of the legal aspects of the mining activities within the BSL concession, solely from the perspective of Indonesian laws. MPL's scope was to confirm that:

- PT. Barasentosa Lestari (the "Company"), a limited liability company duly established and existing under the laws of the Republic of Indonesia is the holder of a mining concession pursuant to the Coal Contract of Work dated 15 August 1994 entered into between the Company and PT. Perusahaan Negara Tambang Batubara (as amended on 27 June 1999 and 14 November 2017) (the "CCoW").
- the CCoW of the Company is valid for 30 (thirty) years commencing as of the Commencement Date. Based on Article 10.2 of the CCoW Commencement Date is defined as "The earliest of, the first date of the month after the first month the average daily coal production reaches 70% of the planned production capacity, but no later than 6 month after the completion of the construction activities, or 10 years and 6 months after the date of the CCoW'; and
- to the best of MPL's knowledge, the tenement is in good standing and the Company has complied with the terms and conditions of the CCoW, except for those which are not likely to have a material adverse effect on the CCoW of the Company.

MPL issued its report on 2 February 2018. Salva Mining relied on the legal report prepared by MPL in preparing this Report.

SALVA
Mining Consultants

4 Coal Resources & Reserves

Resources and Reserves Estimates are presented in the format prescribed in "Appendix 7.5 to the SGX listing rules" in Appendix B.

4.1 Coal Resource

An independent estimate of Coal Resources within the BSL Concession was prepared by Salva Mining and is current as of 31 December 2017. The Coal Resource estimates were prepared in accordance to the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (JORC Code, 2012).

4.2 Resource Classification

The coal resources present in the BSL concession have been classified in accordance with the JORC Code, 2012. The JORC Code identifies three levels of confidence in the reporting of Resource categories. These categories are briefly explained below.

Measured – "*...That part of a Mineral Resources for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with confidence sufficient to allow for the application of Modifying Factors to support detailed mine planning and financial evaluation*";

Indicated – *"…That part of a Mineral Resources for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with confidence sufficient to allow for the application of Modifying Factors in sufficient detail to support mine planning and evaluation"; and*

Inferred – *"…That part of a Mineral Resources for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling."*

For the purpose of coal resource classification according to JORC Code (2012) guidelines, Salva Mining has considered a drill-hole with a coal quality sample intersection and core recovery above 90% over the sampled interval as a valid point of observation.

In terms of Coal Resource classification, Salva Mining is also guided by the Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves (2014) (The Coal Guidelines) specifically referred to under clause 37 of the JORC Code (2012).

Based on due consideration of the continuity of the coal seams as observed in the geological models for each of the three resource areas, the relative lack of evidence for significant faulting and the population statistics of the coal quality composites per seam, Salva Mining has sub-divided Coal Resources within the BSL concession into resource classification categories based on the following spacing's (expressed as a radius of influence around points of observation which is half of the spacing between points of observation):

- Measured 500m;
- Indicated 1,000m; and
- Inferred 2,000 m radius of influence.

Spacing's for the Resource categories was based on geostatistical analysis of raw ash variation in one of the main seams in these blocks.

It is furthermore a requirement of the JORC Code (2012) that the likelihood of eventual economic extraction be considered prior to the classification of coal resources. Therefore, given the average coal quality attributes of the coal, which makes it amenable to be marketed as a thermal coal for both domestic and export power generation purposes, Salva Mining considers that it is reasonable to define all coal seams within the classification distances discussed above, to a depth of 150 m below the topographic surface, as potential open cut coal resources.

4.3 Coal Resource Statement

Coal Resources which have been estimated, classified and reported according to the guidelines outlined in the JORC Code (2012) and the Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves (2014) as at 31 December 2017 are detailed in Table 4:1 below.

Table 4:1 Coal Resources, BSL Mine, 31 December 2017

Resource Classification	Mass (Mt)	TM (adb) (%)	IM (adb) (%)	Ash (adb) (%)	Volatile Matter (adb) %	Total Sulphur (adb) %	GCV (adb) kcal/kg	Relative Density (adb)
Measured	**175**	35.3	19.8	5.0	38.7	0.3	5,055	1.37
Indicated	**144**	33.3	18.8	4.9	38.9	0.3	5,236	1.37
Inferred	**74**	34.9	18.1	6.8	38.5	0.4	5,112	1.40
Total	**393**	**34.5**	**19.1**	**5.3**	**38.7**	**0.3**	**5,132**	**1.38**

Mineral Resources are reported inclusive of the Mineral Reserves
(*Note: individual totals may differ due to rounding*)
Final Inferred Resource rounded to nearest 1 Mt.

More detailed discussion of the Resource estimate including the following aspects in included in the Resource and Reserve Report (Appendix C):

- Description of regional and local geology;
- Exploration undertaken to date including the number of boreholes, borehole locations and spacing, drilling and sampling techniques;
- The number of core samples taken and core recovery percentages;
- Criteria used to define points of observation;
- Ore body modelling techniques and procedures;
- Coal quality results, relative density of coal, laboratory used and analytical standards;
- Classification of Resources; and
- Ore body geometry and dimensions.

SALVA
Mining Consultants

4.4 Coal Reserves

The Coal Reserves estimates were prepared in accordance to the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (JORC Code, 2012).

4.5 Estimation Methodology

An independent estimate of the Reserves within the BSL concession was prepared by Salva Mining as of 31 December 2017. Salva Mining prepared the Coal Reserve estimate on the basis for the Coal Reserve estimate as at that date. The Coal reserves estimates presented in this report are based on the outcome of pit optimisation results and the techno-economics study carried out by Salva Mining.

The subject specialist for Reserves considers the proposed mine plan and mining schedule is techno-economically viable and achievable. This has been done by reviewing all the modifying factors, estimating reserves in the pit shell and doing a strategic production schedule and economic model which confirms a positive cash margin using the cost and revenue factors as described below in this report.

4.6 Modifying Factors

Pre-production activities have already commenced at the Belani Block. Prefeasibility studies were completed prior to commencement of these activities. These studies were accepted as part of the approval process by the Director General of Minerals and Coal, Ministry of Energy and Minerals, Republic of Indonesia prior to being given mining operations approval (CCoW).

Where an entity has an operating mine for an Ore Reserve, its Life of Mine Plan would generally be expected to contain information at better than Pre-Feasibility or Feasibility level for the whole range of inputs normally required for a Pre-Feasibility or Feasibility study and this would meet the requirement in Clause 29 for the Ore Reserve to continue that classification.

Salva Mining has used either modifying factors from the feasibility studies or actual modifying factors based on the current activities at the BSL Mine (where available) which were independently verified by the Salva Mining's subject specialist. In Salva Mining's opinion, the Modifying Factors at BSL Mine are better defined based on actual practices compared to a greenfield project at Pre-Feasibility stage. The following Table 4:2 outlines the factors used to run the mine optimisation and estimate the Coal Reserve tonnage.

Table 4:2 Modifying & Mine Optimisation Factors

Factor	Chosen Criteria
Seam roof & floor coal loss of 0.025 m each	0.05m
Seam roof & floor dilution 0.025 m each	0.05m
Geological & Mining loss including loss in transportation and handling at port	2%
Minimum mining thickness minable coal seam	0.3m
Dilution default density	2.2bcm/t
Dilution default calorific value	500Kcal/kg
Dilution default ash	75%
Overall Highwall and Endwall slope	35º

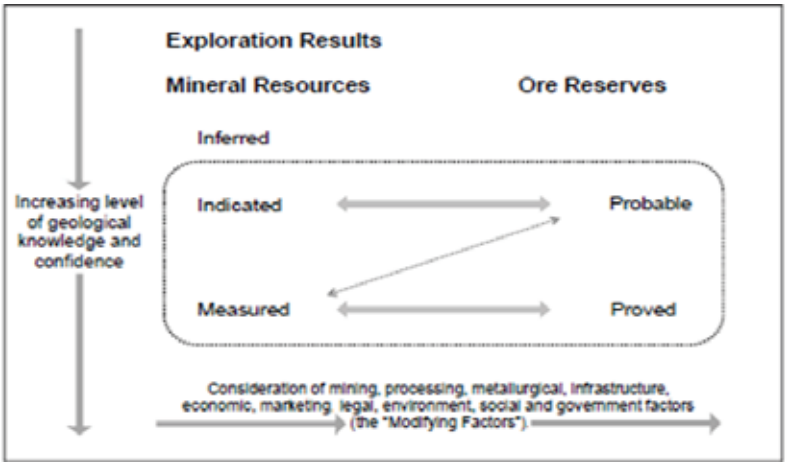
Factor	Chosen Criteria
Maximum Pit depth	150m (for Belani COSR 10:1)
Minimum Mining width at Pit bottom	25m
Mining, Coal handling and Transport Cost	Available & Used
Coal Selling Price for Break-even Stripping Ratio calculation	Muara Lakitan-US$ 34.3/tonne Batukucing - US$ 37.6tonne Belani - US$ 39.6/tonne
Government Documents / approvals Supplied by Client	√
Environment Report supplied by client	√
Geotechnical Report supplied by client	√
Hydrogeology Report supplied by client	√

4.7 Reserves Classification

Under the JORC Code as shown below only Measured and Indicated Coal Resources can be considered for conversion to Coal Reserves after consideration of the "Modifying Factors" including mining, processing, economic, environmental, and social and government factors.

To convert Resources to Reserves it must be demonstrated that extraction could be justified after applying reasonable economic assumptions. Proved Reserves is derived from the highest level geological confidence of established Measured Resources while Probable Reserves is derived from a moderate geological confidence level established Indicated Resources. A level of uncertainty in any one or more of the Modifying Factors may result in Measured Resources converting to Probable Reserves depending on materiality. A high level of uncertainty in any one or more of the Modifying Factors may preclude the conversion of the affected Resources to Reserves (Figure 4:1).

Figure 4:1 General relationships between Mineral Resources & Ore Reserves



Source: JORC Code 2012

This classification is also consistent with the level of detail in the mine planning completed for BSL Coal concession deposits. In the opinion of Salva Mining, the uncertainties in most of these are not sufficiently material to prevent the classifications of areas deemed Measured Resources to be areas of Proved Reserves and areas deemed Indicated Resources to be the areas of Probable Reserves.

4.8 Statement of Coal Reserves

The Statement of Coal Reserves has been prepared in accordance with the 2012 Edition of the JORC Code. The total ROM coal Reserves and Coal Quality is summarised in Table 4:3. Total ROM coal Reserves are same as total marketable coal Reserves.

Table 4:3 Coal Reserves, BSL Mine as on 31 December 2017

Concession	Coal Reserve (Mt)			RD, adb t/m3	TM, arb %	IM adb %	Ash, adb %	CV, arb Kcal/kg	TS, adb %
	Proved	Probable	Total						
Muara Lakitan	109.8	31.3	141.1	1.38	36.8	20.9	5.0	3,977	0.30
Batukucing	1.7	11.5	13.1	1.42	33.6	9.9	5.4	4,369	0.45
Belani	18.8	21.6	40.4	1.33	28.2	19.5	4.8	4,596	0.29
Total	**130.3**	**64.4**	**194.6**	**1.37**	**34.8**	**19.9**	**5.0**	**4,132**	**0.31**

More detailed discussion of the Reserve estimate including the following aspects in included in the Resource and Reserve Report (Appendix C):

- Reserve estimation methodology;
- Discussion on Modifying Factors;
- Current Mining Operations;
- Pit Optimisation;
- Pit design considerations;
- Cut off parameters and pit limits;
- Audits and reviews; and
- Reserve Classification and Reserves statements.

SALVA
Mining Consultants

5 Mining Schedule

A life of mine (LOM) plan was prepared based on the final pit design. This was done to ensure that the proposed mining method would be practical and achievable and that the proposed dumping strategy would be able to contain the waste mined in the final pit design. This provides a check on the reasonableness of the assumed waste mining costs and estimates the average waste haul per mining period.

Inferred Resources Within Optimized Pit Shell were used to estimate Coal Reserves for the BSL concession. It contains a significant proportion of Coal Resources that are classified as Inferred Resources. Under the JORC Code, these Resources cannot be converted to Reserves because of insufficient boreholes present within reasonable proximity, where core samples were collected and analysed. Hence, these coal resources have been classified as Inferred Resources within optimized pit shell.

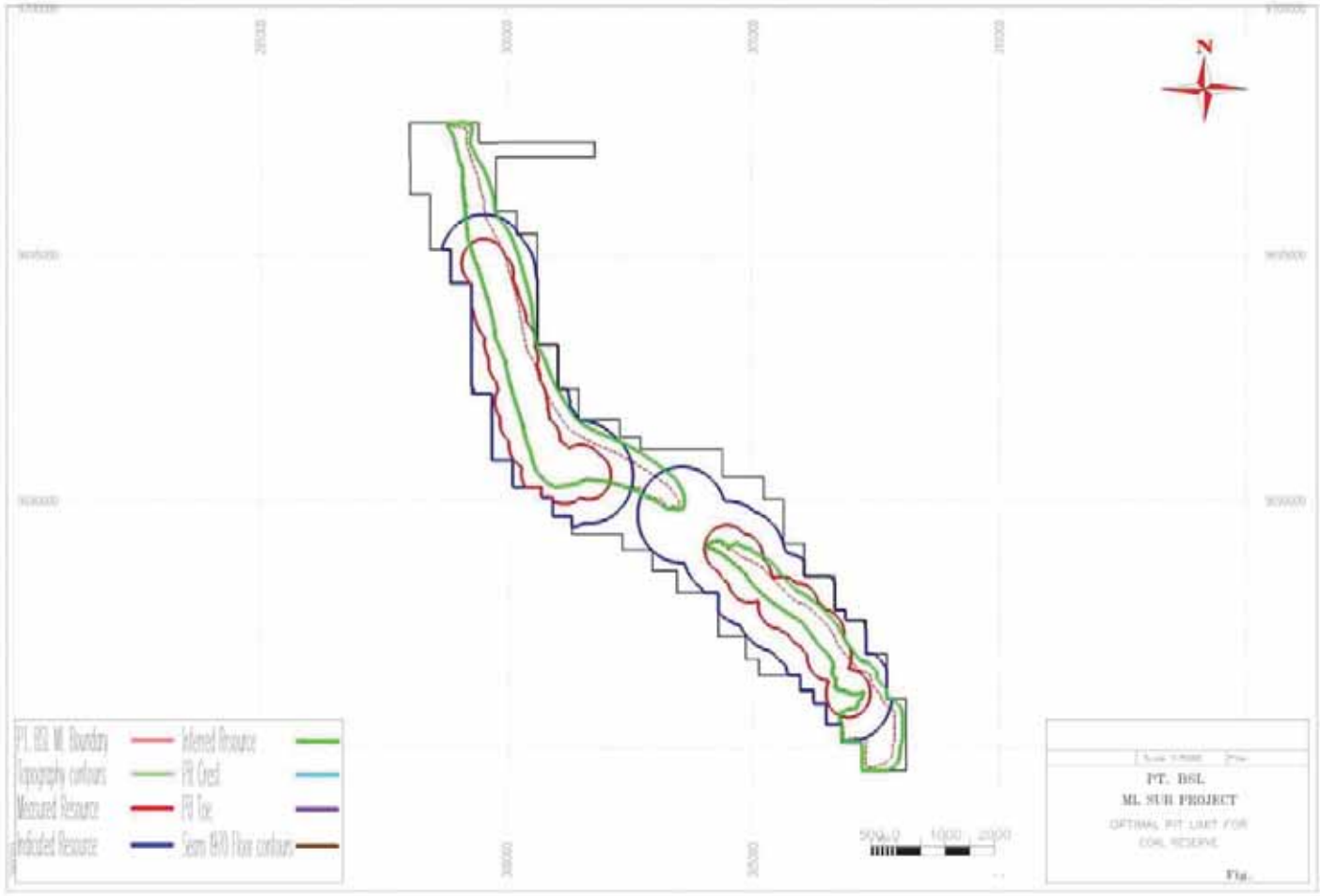
These estimated "Inferred Resources within optimized pit shell" are generally from open hole intersections, where geophysics data at sufficiently close spacing reasonable confirms the continuity and thickness of coal seams and partings.

In the process of Reserve Estimation, Salva Mining has followed the process which aimed to minimize the quantity of Inferred Resources within optimized pit shell. included in the final pit designs. However, under certain circumstances, it was considered necessary to include this coal as exclusion of it would result in an impractical pit design. Typical situations where inclusions of Inferred Resources within optimized pit shell. within the pit design were:

- Inferred Resources within optimized pit shell located at the sub-crop but with Measured and Indicated coal located down dip;
- Small areas of Inferred Resources within optimized pit shell located close to the high-wall where exclusion would result in unrealistic high-wall shapes; and
- Thin seams in the stratigraphy where it is difficult to achieve sufficient core recovery or sufficient core for analysis to classify the coal as Measured or Indicated, but which are underlain or overlain by thicker seams with Measured and Indicated Resources.

A schematic diagram for ML block showing other minable tonnes for the main seam 970 within the designed Pit shell has been shown in Figure 5:1 below.

Figure 5:1 Inferred Resources within optimized pit shell



Salva Mining notes that care must be taken with the inclusion of Inferred Resources within optimized pit shell in life of mine schedules to avoid cases where confidence in the thickness, continuity and quality of the coal is so low that resulting pit designs and schedules would be unrealistic. During the Reserve estimation process, the subject specialist inspected these seams and determined an appropriate limit for the final pit shell taking these considerations into account. The quantity of Inferred Resources within optimized pit shell inside the pit designs with Reserves and the scheduled tonnes are shown in Table 5:1.

Table 5:1 LOM Schedule, Inferred Resources within optimized pit shell

Mining Block	Coal Reserves	Inferred Resources within optimized pit shell	Salva Mining Scheduled LOM
ML Block	141.1	158.9	141.1
BK Block	13.1	18.9	13.1
BL Block	40.4	53.8	40.4
Total, BSL	194.6	231.6	194.6

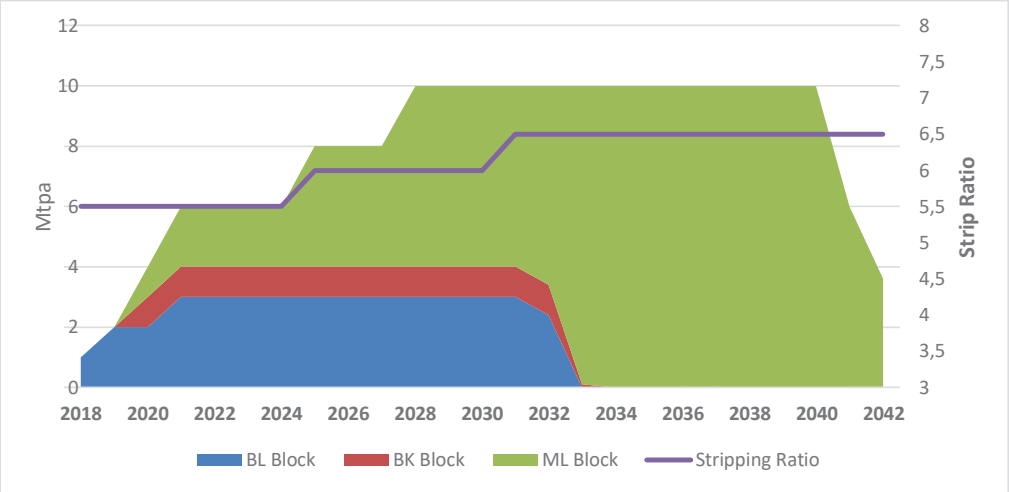
To mitigate the risk associated with the inclusion of Inferred Resources within optimized pit shell tonnes and to be on conservative side, Salva Mining has opted to keep total minable tonnes over LOM to be equal to the quantity of proved and probable reserves only for the purpose of this valuation report. In Salva Mining's opinion, significant upside potential exists to mine these additional "Inferred Resources within optimized pit shell".

5.1 Mine Schedule

As per preliminary production schedule, the minable tonnes over life of mine are estimated to be 194.6 Mt, requiring waste mining of 1207 Mbcm. The LOM stripping ratio is estimated to be at 6.2 bcm/t of coal mined. The schedule targeted production of 1 Mt for 2018, 2 Mt in 2019, and then increasing to 6 Mt by year 4 onwards with peak production of 10 Mt (from year 11 onwards) for all three pits combined together (see Figure 5:2).

Pre-production activities at BL block has commenced, while production from BK and ML Blocks is expected to commence from 2020 onwards.

Figure 5:2 Life of Mine Schedule



Salva Mining recommends converting LOM Mine plan into detailed quarterly mining schedule reflecting up to 10 Mtpa target production rate. This document will address all the necessary detailed aspects related to the mining and associated activities for this project. Completion of this document will assist in reducing contingency which is factored in the current LOM plan.

5.2 Mining Operations

Pre-production activities have commenced at the Belani sub block (Figure 5:3). GEAR plans to commence mining at ML and BK Blocks in 2020.

Currently, pre-production operation within the BSL concession is carried out by conventional open pit mining method using truck and excavator combination. Mining of both coal and waste are outsourced to third party contractor, which are a common practice in Indonesia.

Figure 5:3 Pre-production Operations – BL Block

The mining method at BSL concession can be described as a multi seam, moderate dip, open cut coal mine using truck and shovel equipment in a combination of strip and haulback operations.

5.3 Top Soil Removal

It is necessary to clear land and remove topsoil to advance any open pit mining operations. At BSL concession, land clearing and topsoil removal is undertaken by contractors. Natural Vegetation is cleared by using dozers. The vegetation is pushed into piles and moved to a suitable location. All necessary care is taken to minimize soil profile disturbances and same process will be followed during the life of mine operations. Once land is cleared, a fleet of small trucks and excavators removes topsoil which is either preserved for final reclamation or directly dumped into final landform area (where coal is already mined out) for rehabilitation.

5.4 Drilling and Blasting

Most of the coal mining operations in Indonesia do not require drilling and blasting of overburden material to expose coal. The overburden is free digging which is not typical in countries outside Indonesia. It is generally possible to mine waste up to 100 m by either free digging with excavator or ripping with dozers. However, in some large operations it is more efficient to drill and blast waste overburden or inter-burden before handling by excavator as blasting significantly improves excavator productivity.

At the time of writing of report, drill and blast was not required in all blocks of BSL concession, and is considered unlikely based on the current operations at nearby assets.

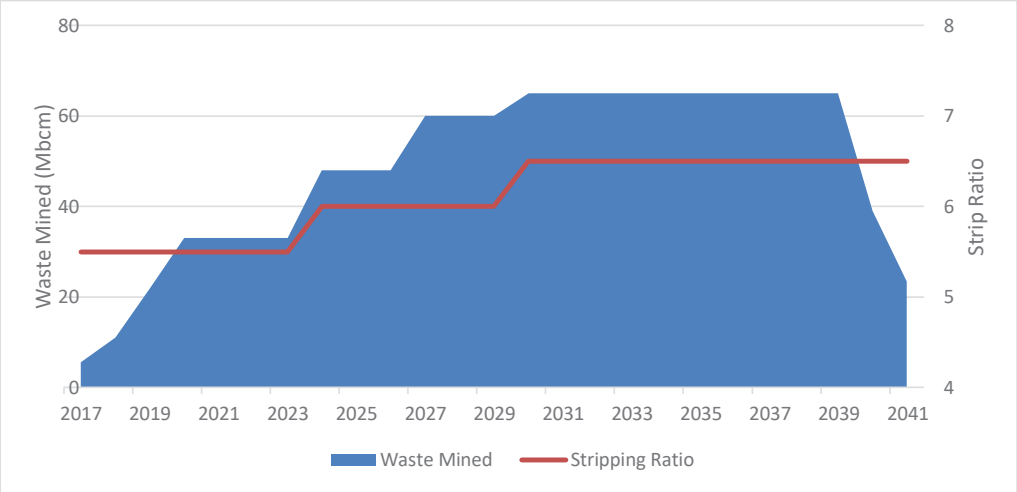
5.5 Waste Excavation

Waste material is mined using hydraulic excavators and loaded into standard (up to100 tonne capacity) rear tipping off-highway trucks for haulage to rock waste dumps which are either in close proximity to the pits or within-pit where possible. Diesel powered hydraulic excavators in backhoe configuration are currently being used, and it is assumed for the purpose of this study that this type of equipment will continue to be used over the life of mine. The new bench will be opened as 5-meter height which will be subsequently converted into a 10 m bench.

Waste will be dumped in lifts with a typical height of 10 m with dozers pushing waste and ensuring the dump area is clean and that safety berms are maintained. A swell factor of 1.2 was assumed for all waste dumping and handling calculations. The operations plans employ 100 tonne excavators and 50 tonne capacity trucks for waste excavation and hauling on site.

However, future increases in mining rate will require upsizing of the mining fleet. The waste to be mined over life of mine has been shown in Figure 5:4.

Figure 5:4 LOM Waste Excavations



5.6 Dewatering

For any efficient mining operations, dewatering of pit and pit water management is of critical importance. Mine design incorporates appropriate pit sumps and pumps for water management. The pit drainage system is designed to prevent external water from entering into pit.

SALVA
Mining Consultants

6 Coal Handling and Coal Logistics

The company has previously engaged specialist logistics consultants, Royal Haskoning DHV in 2013 to review and prepare detailed logistics options studies for transporting coal from Muara Lakitan, Batukucing and Belani deposits by river (barges). Further work to assess road haulage was assessed in 2016.

Two viable logistic routes were identified:

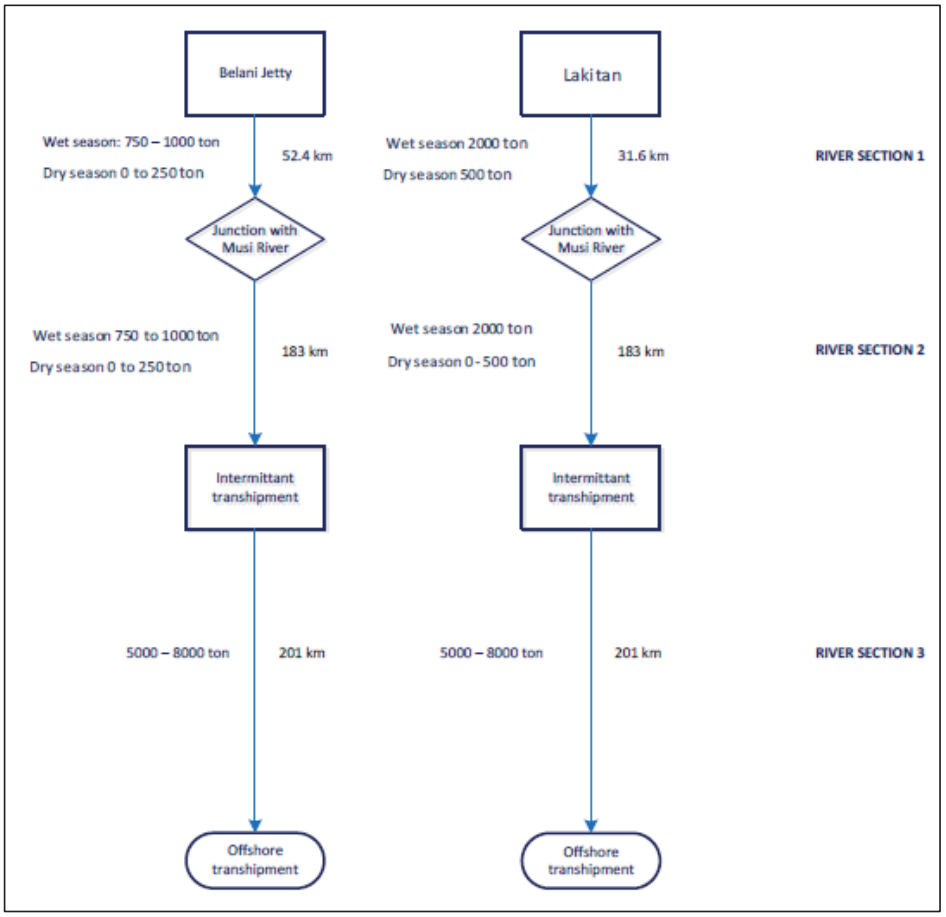
- Southern Barging Route; and
- Northern Road and Barge Route.

The brief summary for both the options of coal transport study has been discussed below.

6.1 Southern Connection – Coal transport by River

In this option, it is planned that the coal from predominately Muara Lakitan (ML) Pit along with some coal output from Batukucing Pit will be transported on the Musi River (Figure 6:1).

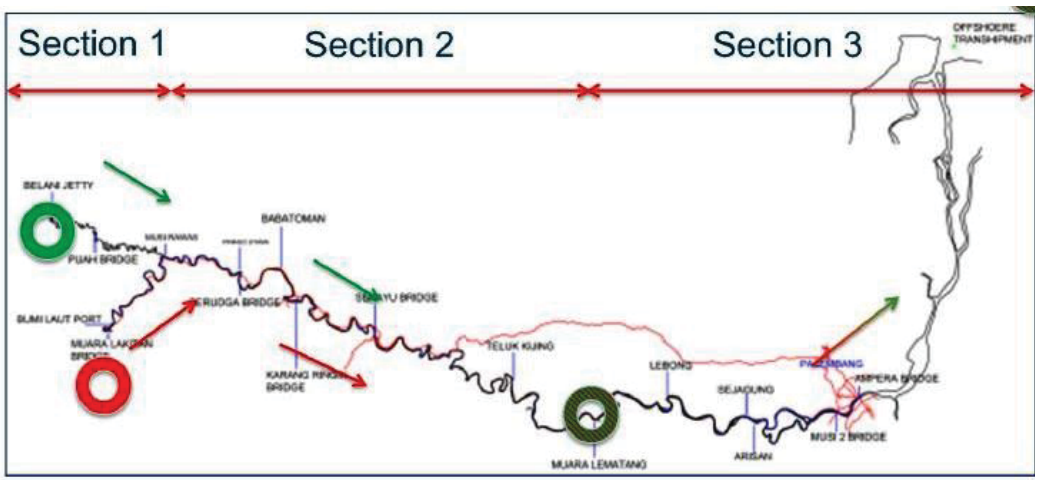
Figure 6:1 Overview - Coal Transport by River



Coal from the Muara Lakitan Jetty (ML Jetty) is planned to be barged through Musi river by barges up to 2000t capacity to the intermittent stockpile at Muara Lematang located downstream on the Musi River.

Coal from the Batukucing Pit (and potentially Belani Pit) will be barged on the Rawas River via the confluence with Musi River to the intermittent stockpile at Muara Lematang located along the Musi River (Figure 6:2).

Figure 6:2 Coal Transport by River



The water level of the Musi River downstream of Muara Lematang does not vary much over the seasons, due to the relative proximity of the sea and the influence of tides; this results in river depths being much larger throughout the year.

A key issue is the size of barges suited to the upper reaches of the Musi River, including the impact of seasonal conditions on barge traffic-ability. The capacity of barges up-to the intermittent stockpile at Muara Lematang will be dependent upon draft of the river due to seasonal flow of the river in the upper reaches. Depending on the draft, it is anticipated that barges of 1,000t to 2,000t will be able to work on the upper segment to the intermediate port at Maura Lamatang.

Coal from the intermittent stockpile at Muara Lamatang will be transported by the larger barges of 7500 t to the offshore trans-shipment port at the mouth of the Musi River (section 3 of Figure 6:2).

Coal transport through barges has also considered the existing limitations (bridges over Musi river) for its capacity assessment (Figure 6:3).

Figure 6:3 Location of Ports and Bridges on Musi River

The maximum volume of coal that can be transported on the Musi and Rawas River is mainly governed by the navigation constraints on the upper sections of the rivers and the loading capacity of barge loading terminals. The upper section of the Musi and Rawas River are subject to the lowest drafts during the dry season. The river is also narrower in the upstream part and bends are much sharper due to higher current velocities. The capacity assessment is therefore made upon;

The river logistic study determined that the Maximum barging capacity is governed on both upstream sections of the narrow bends, sharp bends and narrow sections, which limits the export capacity of both mines to about 3 million m^3 which is approximately 4.2 Mt assuming density of 1.4 t/m^3.

For the purpose of this valuation, Salva Mining has opted to be conservative and assumed maximum capacity of 4 Mtpa only.

6.2 Northern Connection – Coal transport by Road & then Barge

In another option, it is proposed to transport coal from Belani and Batukucing pits by road to the Gorby Port which is located north east of PT. BSL concession.

Coal will transport of ~130km from the Belani pit and ~170km from Muara Lakitan pits by road to the Gorby Port. Table 6:1 exhibits the various road sections and the distances. There are local roads (govt/village roads) available along with dedicated private haulage road from the pits to the Gorby Port which needs to be upgraded to carry proposed peak production capacity.

Coal from Gorby port will be further transported by the 7,500t barges to the offshore trans-shipment port for coal export for a distance of ~120 km.

SALVA Mining Consultants

Table 6:1 Road Logistics

Section		Distance (km)	Road Track	Upgrade Reqd.
From	To			
Belani	Gorby road	9.8	No	Yes
Muara Lakitan	Gorby Road	53.5	Existing	Yes
Gorby Road	Government Road Junction	13.0	Existing	No
Government Road Junction	Macang Sakti Junction	7.6	Existing	No
Macang Sakti Junction	PT Bumi Persada Road	36.5	Existing	No
PT Bumi Persada Road	Pulia Gading Village	55.0	Existing	No
Pulia Gading Village	Gorby Port	6.1	Existing	Yes
Distance (km)		**128 -171**		

The existing and proposed road network to the Gorby Port from Belani pit is presented in Figure 6:4 and from Muara Lakitan pit in Figure 6:5.

6.3 Summary of Logistics Options

BSL has proposed to use both Northern Connection (road to Gorby Port & then large barges) and Southern Connection (small barge to Muara Lematang and then larger barges). Projected tonnages are shown in Table 6:2.

SALVA Mining Consultants

Table 6:2 Logistics (Mt) over Life of Mine

Item	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Road - BL	1.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-	-	-	-	-	-	-
Road - BK	-	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-	-	-
Road - ML	-	-	-	-	-	-	-	-	-	-	2.0	2.0	2.0	6.0	6.0	6.0	6.0	6.0	2.0	1.2
Total - Road	**1.0**	**2.0**	**3.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**2.0**	**1.2**
Barge - ML	-	-	1.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.0
Total - Barge	**0.0**	**0.0**	**1.0**	**2.0**	**2.0**	**2.0**	**2.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**2.0**

Figure 6:4 Coal Transport by Road from Belani Pit to Gorby Port

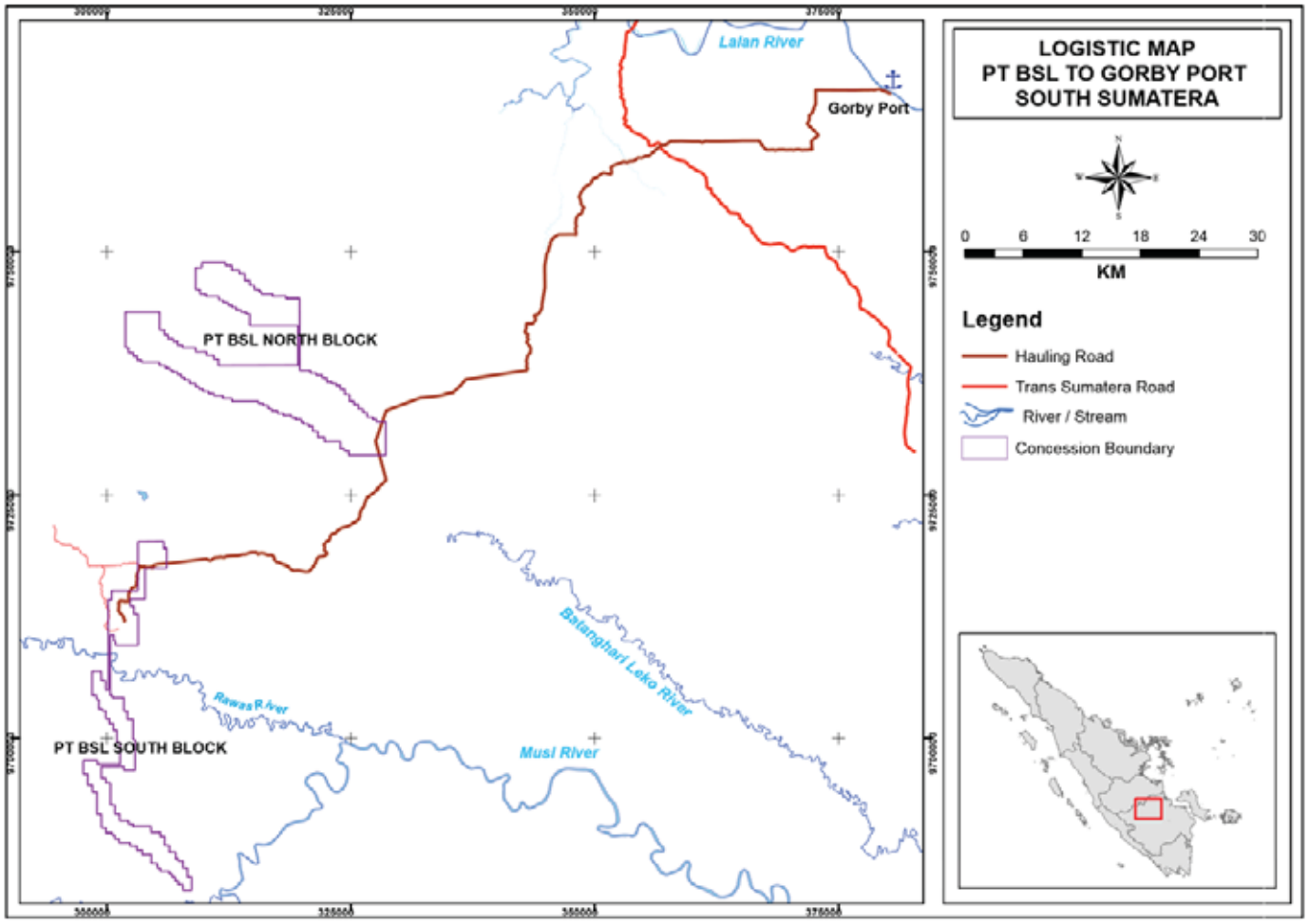
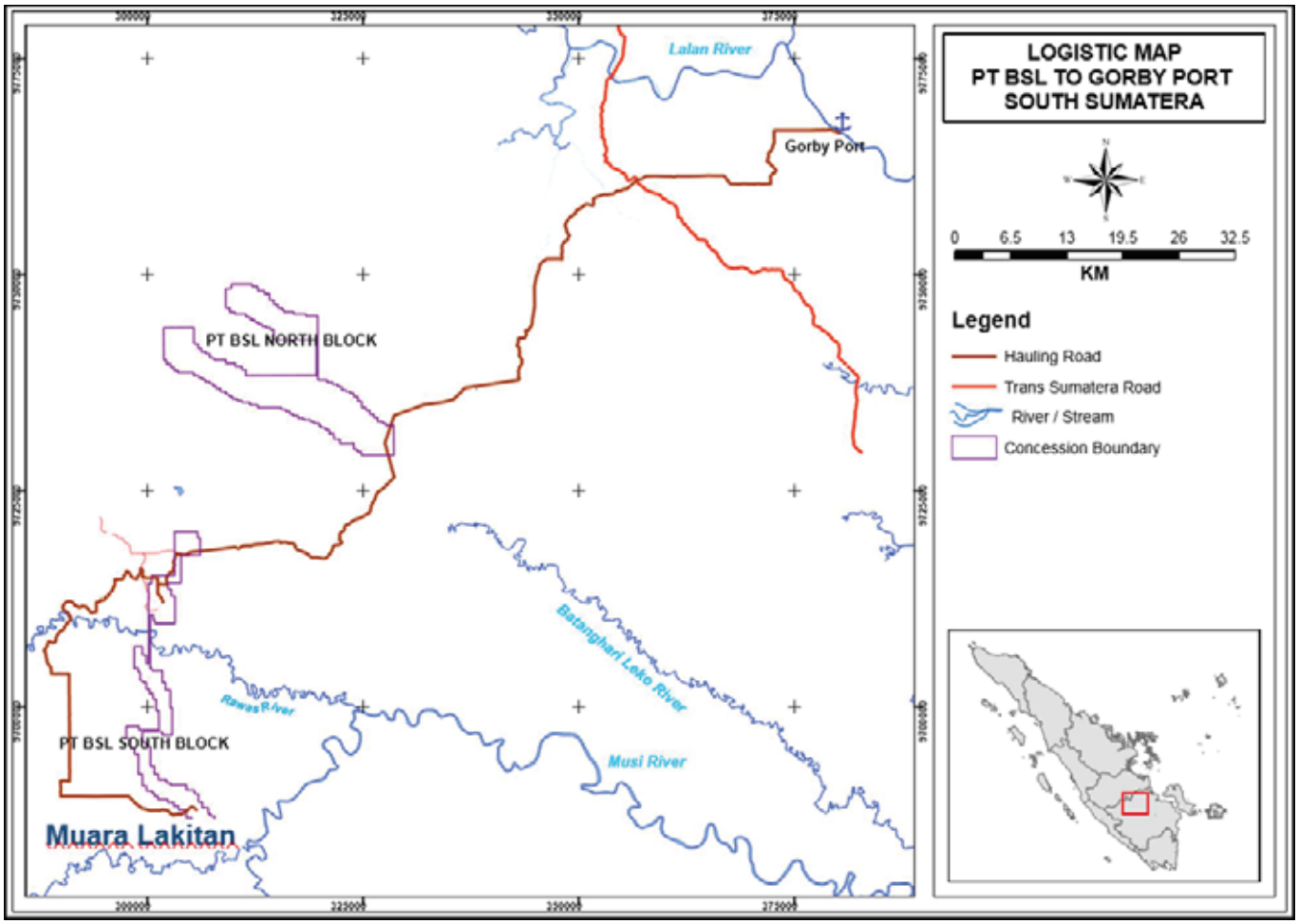


Figure 6:5 Coal Transport by Road from Muara Lakitan to Gorby Port



SALVA
Mining Consultants

7 Environment and Community Relations

A preliminary assessment of potential issues pertaining to environment and community relations which may impact the Project valuation was assessed by Salva Mining. These include the following activities:

- Review of environment management procedure;
- Review of the environment impact assessment and management plans (AMDAL); and
- Review of Corporate Social Responsibility Reports.

Salva Mining's preliminary assessment doesn't reveal any issues related to environment and community relations that will adversely impact project valuation. However, it should be noted that Salva Mining's assessment was only preliminary in nature and Salva Mining cannot provide any guarantee or warranty that significant environmental or community issues will affect the operation.

Key environmental and community relations issues are discussed below.

7.1 Environmental Aspects

Key issues which can potentially impact on project valuations are: Water Run-off, noise and dust, rehabilitation and protection of aquifers.

7.2 Water Run-off from site

If sediment loads are high or if water is acidic Run-off from dumps, stockpiles, roads and water pumped from pits has the potential to pollute local rivers, creeks and vegetation. This is managed through the use of bunds, drains and sediment ponds of sufficient size to allow small particles to settle out of the water. Regular monitoring of water discharge points is required under government regulations.

7.3 Noise and Dust

Noise and Dust originating from mine operations haulage and coal handling have the potential to impact the local environment, particularly if villages and local communities are located within close proximity to mining and coal handling operations. Dust is generally managed by using water trucks on haul roads and by spraying water or dust suppressant chemicals to minimise dust being airborne and suppressing it.

7.4 Rehabilitation

A large area of land will be cleared as part of the BSL mining operation, although much of this area is secondary growth forest or plantations. The disturbed area is generally rehabilitated and revegetated by mining and handling topsoil separately, and then restoring topsoil to rehabilitated sites and replanting suitable vegetation. Reclaimed land will be transferred back to the local communities for community development purposes.

7.5 Hydrocarbon Management

There are significant storage facilities of fuel and oils at the BSL site and discharge of these to the environment could result in significant damage. Hydrocarbons are managed with bunds around the storage areas, oil traps at water discharge points from workshop areas and with response and clean-up plans for any spills.

7.6 Community and Sustainability

The company has made substantial efforts to integrate with the local population in the vicinity where its mines are located, as it believes that these efforts are integral to the stability and development of its business. Maintaining a good relationship with local communities has been key requirement for the continued success of the BSL operation.

7.7 AMDAL

Salva Mining notes that the current approved AMDAL for the BSL concession does not address all the issues associated with the medium to long term plans to expand production. The revision and approval of an updated AMDAL for the site is needed to achieve the designed mine plan. GEAR advise that AMDAL approval for expanded throughput is likely to be received.

Mine closure plans for the updated mine plan have yet to be completed; however, Salva Mining does not foresee any significant issues with this aspect of the operation. A reasonable allowance has been made in for environmental management, rehabilitation and mine closure.

SALVA
Mining Consultants

8 Valuation

8.1 Valuation Approaches

There are a number of methods used in valuing mineral assets. The applicability of these methods depends on project specific factors including the level of maturity of the mineral assets.

In determining the appropriate method(s) to be used for valuation of these assets, Salva Mining has taken into consideration the classification of these assets as defined in the VALMIN Code and the different methodologies that are generally accepted as industry practice for each classification. Generally, there are three broad methods of valuation that are used for valuing mineral assets. These are the cost approach, income approach and market approach. The asset classifications that may be applied to a project are set out in Table 8:1 below.

Table 8:1 Typical Valuation Methods

Classification	General Description	Key Valuation Methods
Exploration Areas	Properties where mineralisation may or may not have been identified, but a Resource has not been identified.	Rule of Thumb, Geo-scientific method, Comparable Transactions.
Advanced Exploration Areas	Properties where considerable exploration has been undertaken and specific targets identified. Resource estimation may or may not have been made. Good understanding of mineralisation present.	Geo-scientific method, Appraised Value Method, Comparable Transactions.
Pre- development Projects	Properties where mineral Reserve have been identified but decision to proceed with development have not been made.	The above methods and DCF/NPV valuation.
Operating Mines	Properties where mining activities are already commenced.	DCF/NPV valuation.

8.2 Valuation Approach for Assessing the BSL Mine

The BSL Mine is an advanced project where pre-production activities has jcommenced at Belani (BL) Sub-Block. Coal Resource and Reserve has been determined in all 3 sub-blocks. Although mining activity at the ML and BK Sub-Block is yet to commence but the Coal Resource and Reserve has already been delineated at this block and a decision to commence mining has already been made. Therefore, in Salva Mining's opinion, it is appropriate to use DCF method to determine Net Present Value (NPV) of the whole project.

Therefore, for the purpose of valuation, Salva Mining has opted to value the Coal Reserves present within the BSL concession on DCF based method. The cash flow model constructed by Salva Mining was based on the production schedules, costs and prices developed for this project. No separate value is ascribed to the exploration potential of the areas outside the blocks contained in the mine study with Coal Reserves. Salva Mining has opted to value the project on the basis of Coal Reserves only using the DCF method.

9 Economic Parameters

9.1 Royalty and Local Government Fees

Royalty is generally levied as a percentage of sale proceeds to be applied for the different types of coal depending on its Gross Calorific Value ("GCV" and method of mining. However different royalty rates have been adopted for different types of ownership structure including: Contract of Work holders (CoWs), Coal Contract of Work holders (CCoW), Izin Usaha Pertambangan holders (IUP), and Izin Usaha Pertambangan Khusus holders (IUPK).

At present, a range of percentage of sales proceeds is applicable for different type of coal mining arrangements as detailed in Table 9:1. However, holders of IUPKs are required to pay an additional royalty of 10% of their net profit. 40% of this incremental royalty is paid to Central Government and remaining is shared between province and respective regency.

Table 9:1 Indonesian Coal Royalty Rates

Concession Type	Royalty	Current Rates (2014)
CCoW and CoW	13.5%	Royalty on HBA price for the coal type
IUP and IUPK	3% - 7% (Open Pit) 2% - 6% (Underground)	The royalty rate depends on air dried calorific value of the coal produced: • 3% of HBA price for coal <5,100 kcal/kg • 5% of HBA price for coal for <5,100 kcal/kg - 6,100 kcal/kg • 7% of HBA price for coal for >6,100 kcal/kg

The BSL concession is a CCoW concession, amenable to be exploited by open-pit mining method. A royalty of 13.5% of revenue excluding barging and transhipping associated cost is applicable to coal sales from the BSL concession. This amount is defined in the PKP2B and subsequent agreements between BSL and the Indonesian Government Regulation No. 17 of 2010 issued by the Minister of Energy and Mineral Resources (MEMR) also requires that all coal sales be made at a minimum (or benchmark) price that is defined by the Indonesian government on a monthly basis. The methodology for calculation of the minimum price is described in Regulation No. 515.K/32/DJB/2011 and Regulation No. 644.K/30/DJB/2013 issued by the Directorate General of Minerals and Coal (DGMC).

Salva Mining assumed that future benchmark prices for Royalty calculations will be equal to or lower than the forecast prices used in this study and thus the forecast coal price has been used for the calculating royalty payments.

The agreement between BSL and the Indonesian Government appears to allow for the Government royalty to be calculated based on the coal sales price (or the benchmark coal price if it is higher) adjusted for the costs incurred past BSL's last loading facility. This effectively means that revenue can be calculated on the FOB, barge loading basis for the purpose of royalty calculation. Regulation No. 644.K/30/DJB/2013 defines the maximum costs that can be deducted

from the sales price for the purpose of the royalty calculation. The current maximum claimable costs are:

- US $0.0221 per tonne nautical mile (US $0.0119 per tonne km) plus US $3.7406 for barging;
- US $4.00 for trans-shipment;
- US $0.25 for survey; and
- 0.8% per shipment for insurance.

Salva Mining has used the lower of actual cost and maximum allowable allowance for barging and trans-shipped activity related costs in determination of royalty payable.

9.2 Inflation Outlook

Salva Mining has developed a nominal cash flow model for calculation of the NPV and assessment of mineral asset value. Salva Mining has assumed cost in US $ in real terms and converted it into US $ nominal terms based on the long-term US inflation factor of 2.4%.

Salva Mining considers this to be an appropriate technique while valuing projects in high inflation, declining foreign exchange rate countries including Indonesia. This is a common approach used in most mineral asset valuation.

9.3 Corporate Income Tax

Corporate income tax is applicable to all Indonesian registered corporations. In 2010, the corporate income tax rate was reduced further to 25% of net taxable profit.

COW and CCoW holders operate under a specific corporate tax rate, which is set out under their contract. Corporate income tax rate is generally stipulated in their contracts and it is different for different generations CCoW holders. For most of the large producers (holders of 1st generation CCoW permit), the initial corporate tax rate is 35% and is applicable for the first 10 years of production. After this, the corporate tax rate reverts to 45% for the remaining life of the mine. The corporate income tax rate for second generation CCoW holders is 25% and for others it is between 30-45%. The higher tax rates for the CCoW holders is compensated for by a lex specialis status, which protects them from the introduction of any additional taxes that are not specified in their initial agreement. The tax rates for different concession types have been shown in Table 9:2.

The BSL concession is a second generation CCoW concession and applicable tax rates will be governed by its contract clause which stipulates that the company is subject to prevailing laws and regulations on taxation. Therefore, in line with the prevailing corporate income tax regulation an income tax rate of 25% is applied to the revenues from the concession.

Table 9:2 Corporate Tax Rates

Concession Type	Corporate Tax
CCoW (First generations)	35%
CCoW (Second generations)	25%
CCoW (others)	30-45%
IUP	25%

9.4 Depreciation and Amortisation

Application of straight line depreciation at 12.5% (for all building and non-building assets) is permitted for first generation CCoW holders. For all other type of coal concession holder's including second generation CCoW concessions like the BSL concession, different rate of depreciation is applicable for different type of assets (Minister of Finance Decree 138/KMK.03/2002 and Amendment 520/KMK.04/2002).

Fixed assets are categorised into four different types depending on nature of assets and its expected useful life. Assets are generally depreciated over 4, 8, 16 or 20 years and the company may opt to either apply a diminishing balance or straight line approach for each category of asset.

Salva Mining has opted to apply straight line depreciation rates depending on type of asset and their useful life.

9.5 Working Capital

Working capital has been included in the financial model has been estimated using the following assumptions:

- Accounts Receivable Days 35;
- Inventory Days 15; and
- Accounts Payable Days 45.

Salva Mining has assessed these assumptions and found them to be in-line with the current operating practices.

9.6 Carried Forward Tax Losses

As per existing law, the tax losses can be carried forward up to 5 years however tax losses cannot be carried back. For the purpose of this mineral asset valuation, Salva Mining hasn't considered any prior carried forward losses as at 31 December 2017.

9.7 Value Added Tax

The prevailing VAT law stipulates that supplies of coal and other natural resources taken directly from the source are not subjected to VAT. This means that there will not be any output VAT applicable to coal produced from the BSL Concession. As per prevailing VAT law, a variable component of contractor cost attracts a 10% VAT. Salva Mining notes that there are uncertainties in current regulations and in the conditions of IUP/CCoWs regarding application of VAT to contractor cost. Erring on the side of conservatism, Salva Mining has opted to be conservative and applied VAT to all variable contractor cost and therefore a VAT rate of 10% is applied on all contractor cost.

9.8 Weightage Average Cost of Capital (WACC)

Weightage Average Cost of Capital (WACC) is generally used as a discount rate for the valuation of advanced mining projects with Reserves. Salva Mining has derived the WACC on the basis of Capital Asset Pricing Model (CAPM). Following is the assumptions used in calculation of WACC (Table 9:3).

Table 9:3 WACC (After Tax)

S.No.	Items	Value	Source
1	Risk Free Rate of Return	6.18%	10 year Indonesia government bond yield as of 23 January 2018 (Source: AsianBondsonline.adb.org)
2	Equity Risk Premium	7%	Indonesia Country Premium (Source: Bloomberg)
3	Relevant Beta	1.05	Unlevered beta of comparable companies, re-levered to average capital structure of comparable companies
4	Company & Project Risk	1.5%	Additional company & project risk
5	Cost of Equity	14.99%	Equal to (1) + (2) x (3) + (4)
6	Debt to Enterprise Ratio	40%	Anticipated proportion of debt for the purpose of WACC calculation
7	Cost of debt (after Tax)	4.46%	Indonesian interbank rate (JIBOR) adjusted for corporate tax as of 24 January, 2017 (source: Bank Indonesia, www.bi.go.id)
8	WACC (after Tax)	10.78%	

Furthermore, Salva Mining has crosschecked the calculated WACC for the project with WACC of the various comparable listed mining companies of Indonesia. Table 9:4 summarises WACC of the various mining companies in Indonesia.

Table 9:4 WACC for Indonesian Coal Mining Companies

Company	Value
Adaro Energy	8.6%
Bayan Resources	8.7%
Barau Coal	9.6%
Average	9.0%

Source: Bloomberg

Salva Mining concludes that the calculated WACC for the project appears to be reasonable when compared with other listed mining companies in Indonesia. For the purpose of this valuation, Salva Mining has applied a WACC of 11% to be conservative.

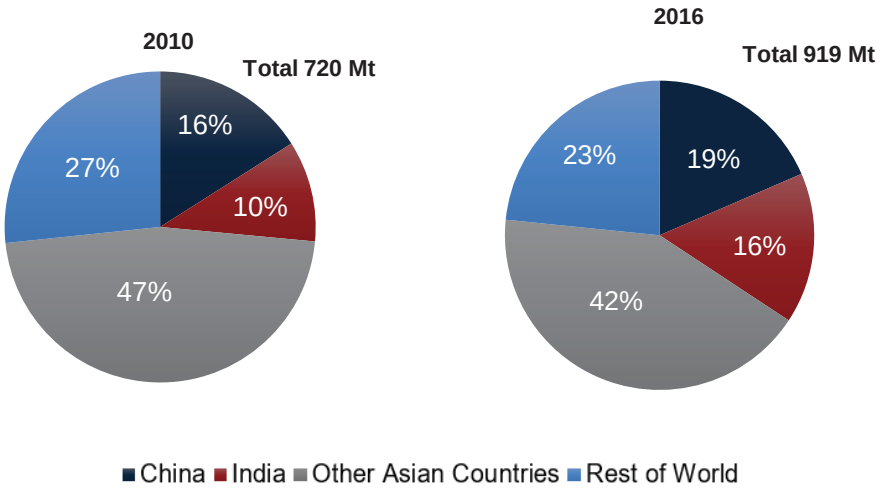
SALVA
Mining Consultants

10 Market Analysis and Coal Prices

10.1 Seaborne Thermal Coal Demand

The global seaborne thermal coal market has grown significantly over the last six years from around 720 million tonnes (Mt) in 2010 to 919 Mt in 2016, registering a compounded annual growth rate (CAGR) of 4.2%.

Figure 10:1 Seaborne Thermal Coal Market



Source: Salva Mining

Over 50% of the world's population lives in South and East Asia. This is the region where the growth Thermal coal demand in Asia is the principal driver of global coal demand (73% of global consumption during 2016). This growth in Asian thermal coal demand has been driven primarily by significant increases in coal-fired electricity generation capacity, as coal is a less expensive source of energy than other fuels such as oil and gas in most geographic regions globally, but particularly in Asia.

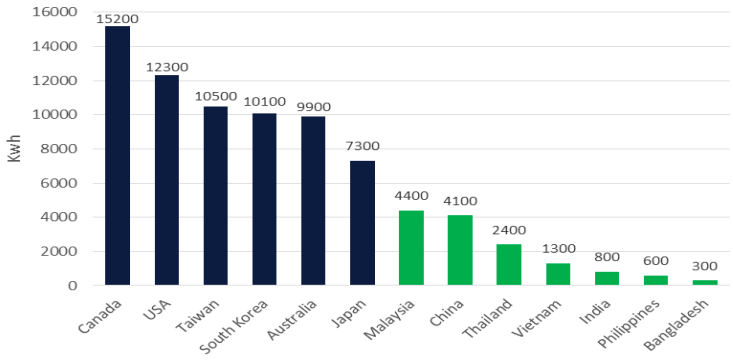
Figure 10:2 Distribution of Global Coal Consumption

Source: IEA

Per capita electricity consumption across the Asian region is relatively low with emerging economies lagging in comparison to consumption levels in global developed economies. Per capita consumption of electricity in India is just 8% that of the per capita consumption of electricity in

Australia. Other Southeast Asian (SEA) economies have similar per capita electricity consumption, offering a significant potential for upside growth.

Figure 10:3 Per Capita Electricity Consumption



Source: IEA

Coal is the cheapest source of energy and will continue to fuel the growth of Asian economies regardless of the recent focus on renewables/green energy. A recent study (Oct 2017) by the International Energy Agency (IEA) reported that electricity is increasing its share in total energy consumption (as compared to oil and gas) and coal is increasing its share in electricity generation in SEA.

10.2 Asian Thermal Coal Demand

The fundamentals for thermal coal demand in Asia are expected to remain robust, mainly driven by population growth, increasing industrialisation and urbanisation in emerging Asian economies.

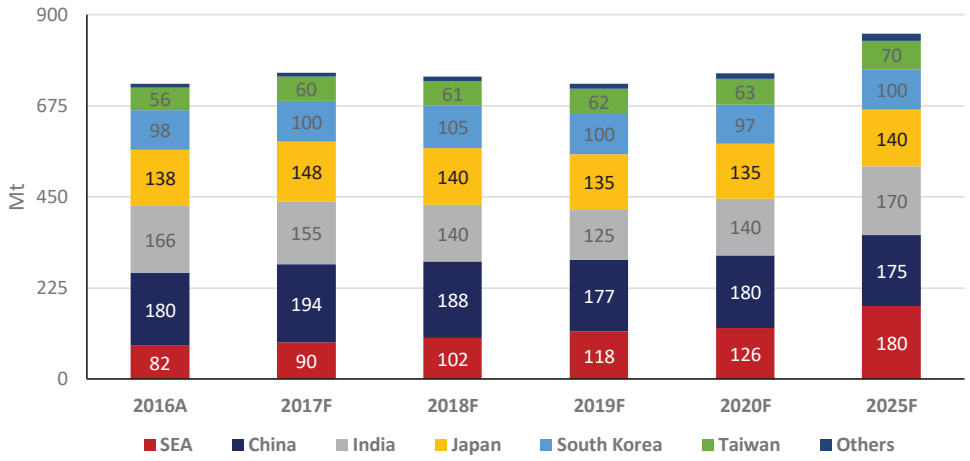
The next phase of Asian economic growth in electricity demand is expected to come from Southeast Asian economies (Thailand, Philippines, Malaysia, Vietnam and Bangladesh), which is expected to drive the seaborne coal demand from 720 Mt in 2016 to 835 Mt in 2025. This forecast demand will not only compensate for the forecast drops in coal imports in India and China but is forecast to also drive Asian thermal coal demand, resulting in a forecast CAGR of 1.8% per annum.

Table 10:1 Asian Seaborne Thermal Coal Demand

	2016A	2017F	2018F	2019F	2020F	2025F
China	180	194	188	177	180	175
India	166	155	140	125	140	170
Japan	138	148	140	135	135	140
South Korea	98	100	105	100	97	100
Taiwan	56	60	61	62	63	70
Southeast Asia*	82	90	102	118	126	180
Others	12	13	13	15	16	20
Total – Asia**	**720**	**747**	**736**	**717**	**741**	**835**

**Southeast Asia includes Thailand, Philippines, Malaysia, Vietnam and Bangladesh*
*** Seaborne demand only, excludes land imports and domestically supplied coal*
Source: Salva Mining

Figure 10:4 Asian Thermal Coal Import Outlook



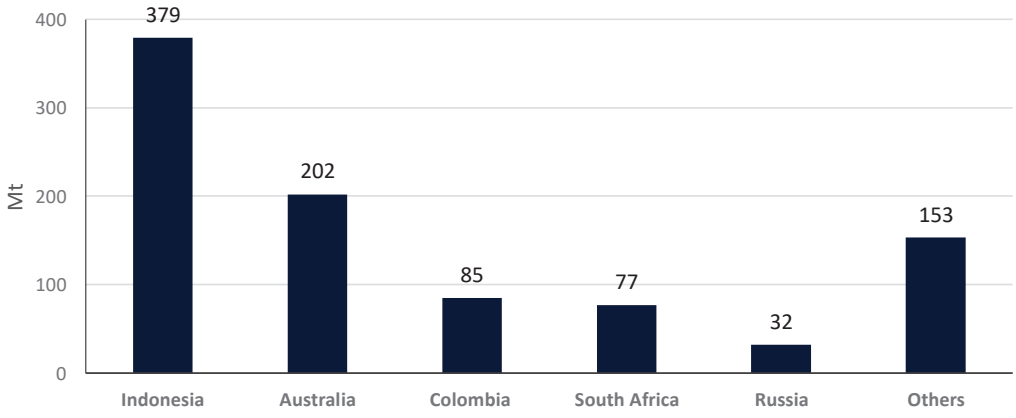
Source: Salva Mining

10.3 Seaborne Thermal Coal Supply

Indonesia and Australia remained the world's largest exporters of seaborne thermal coal in 2016 with 41% and 22% of exports on a tonnage basis, respectively. Colombia and South Africa are the next two largest seaborne thermal coal suppliers with market share of 9% and 8%, respectively.

Although the Russian Federation's thermal exports stood at 160 Mt in 2016, more than 80% of the Russian coal exports are not seaborne, such as coal exports by land transport to European Union (EU), Commonwealth of Independent States (CIS) and China. The majority of Russian seaborne exports are restricted to Japan and South Korea.

Figure 10:5 Seaborne Thermal Coal Exporters



Source: Salva Mining

The major suppliers of thermal coal into the Asian market are Indonesia (56%) and Australia (30%), who are also the largest two exporters of thermal coal globally. Other exporters into the Asian region include South Africa, Russia, USA, and Colombia. These exporters are located geographically further away from Asian users than Indonesia and Australia exporters, and therefore face higher

freight costs, which make them marginal swing suppliers into Asia. As a result, any increase in Indonesian or Australian thermal coal exports typically displace supply from the USA and Russia.

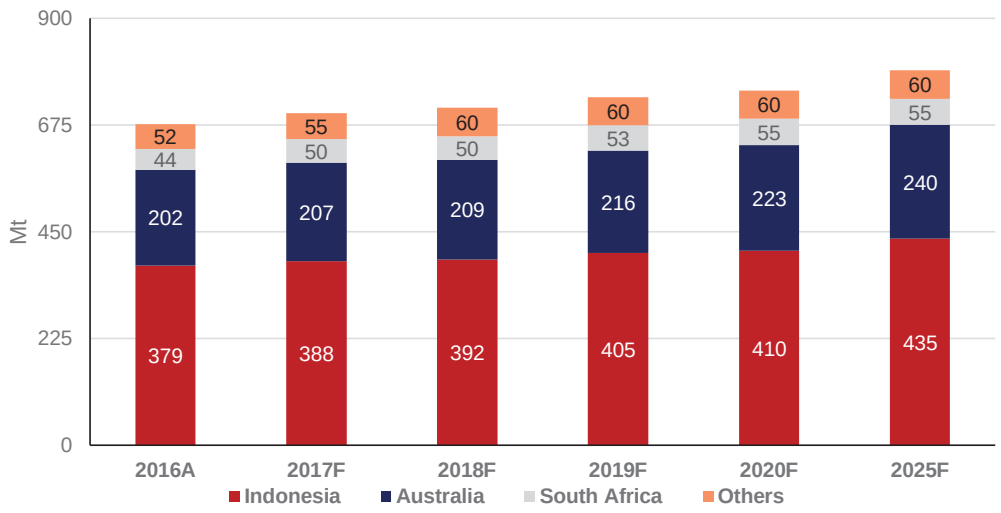
Indonesia and Australia are forecast to continue to supply over 80% of seaborne thermal coal supply to Asia through 2025. South Africa will continue to be preferred supplier for high energy coal for power plants based on west coast of India. Other suppliers are forecast to include Russia, USA, Colombia and other. The following table shows the major exporters of thermal coal (Mt) to Asian markets.

Table 10:2 Asia-Pacific Seaborne Thermal Coal Supply

	2016A	2017F	2018F	2019F	2020F	2025F
Indonesia	379	388	392	405	410	435
Australia	202	207	209	216	223	240
South Africa	44	50	50	53	55	55
Others	52	55	60	60	60	60
Total – Asia Pacific	**677**	**700**	**711**	**734**	**748**	**790**

Source: Salva Mining

Figure 10:6 Asia Pacific Basin Seaborne Thermal Coal Export Outlook



Source: Salva Mining

10.4 Indonesian Coal Supply

Indonesia is the world's largest exporter of seaborne thermal coal, shipping over 379 Mt in 2016, which accounts for approximately 42% of the total global market, almost double the next largest supplier, Australia (22%). Indonesian thermal coal production has significantly increased since 2000 to reach 430 Mt in 2016, after peaking at 460 Mt in 2014.

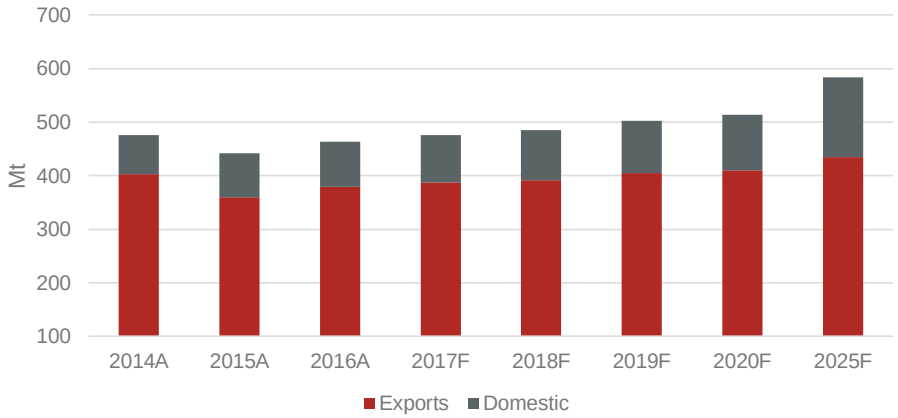
The majority of thermal coal produced in Indonesia is exported to Asian markets, mainly to India, followed by China, South Korea, SEA, and Japan. Indonesia's strong coal sector growth can be attributed to three main factors:

- Growing international demand for lower energy cost effective thermal coal for power generation;
- Proximity to high-growth markets in Asia, particularly India and China; and
- Competitive advantage due to lower capital and operating cost structures compared to international standards.

Indonesia is the world's largest exporter of seaborne thermal coal, producing over 464 Mt in 2016, and exporting 379 Mt which accounts for approximately 42% of the total global market, almost double the next largest supplier, Australia (22%).

Indonesian exports in 2015 fell for the first time in over a decade, down to 360Mt but are revering back and forecast to exceed previous peak exports by 2019.

Figure 10:7 Recent Trend in coal production and Exports from Indonesia



Salva Mining

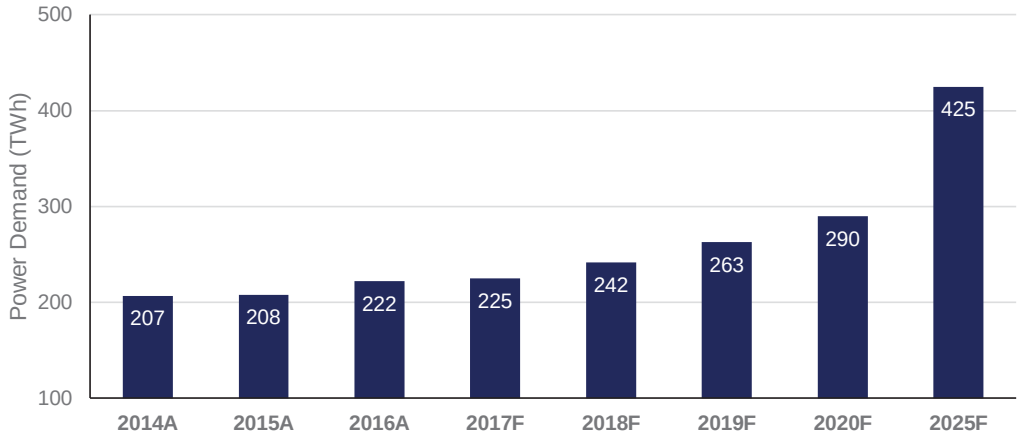
10.5 Domestic Power Demand

The domestic demand for thermal coal is largely driven by government energy policy which laid out plans to boost domestic power generation by coal fired power stations in country by announcing Fast Track Programs for power generations.

Along with PLN, several Independent Power Producers (IPPs), such as Java Power at Paiton, are currently constructing coal fired power plants. These power producers have signed offtake agreements with PLN to supply electricity at a contracted price. The projects are mainly developed by consortiums of Chinese, Japanese and South Korean companies with a local operator.

Electricity demand has grown at an average of 7.1% per year since 2009 from 135 TWh in 2009 to 208 TWh in 2015. At the end of 2015, Indonesia's total power generation capacity was 55.5 GW, of which 70% was owned by state owned PT Perusahaan Listrik Negara (PLN), 21% was procured by PLN from contracted independent Power Producers (IPPs) and the rest by private power utilities and captive power plants. Coal accounts for 29% of the electricity generated in 2016.

Figure 10:8 Indonesia - Power Demand Outlook



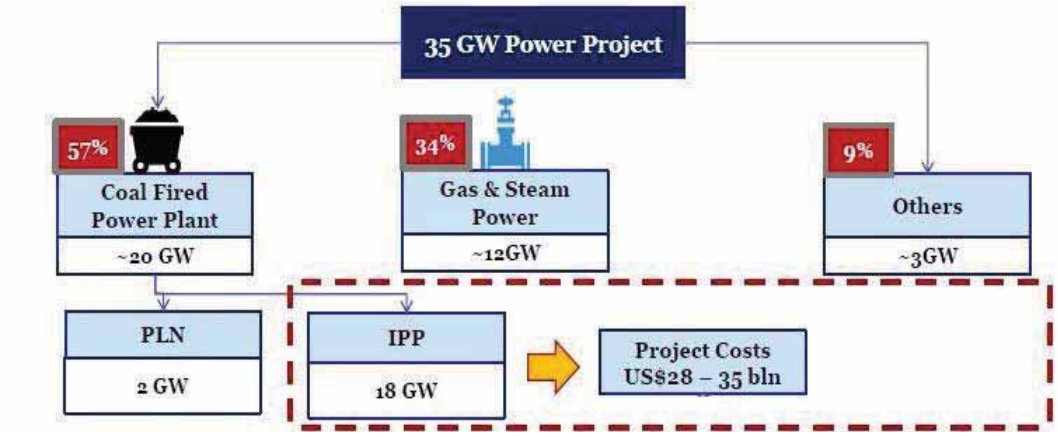
Data Source: PLN

Fast Track Power Generation – 35 GW Program

About 84% of Indonesia's population has access to electricity in 2016 compared to less than 68% in 2010. Despite this progress, Indonesia still has a low electrification rate compared to countries with similar income levels. In June 2016, the Minister of Energy and Mineral Resources issued its 2016 – 2025 Electricity Supply Business Plan (Rencana Umum Penyediaan Tenaga Listrik – "RUPTL") which announced a goal to achieve an electrification ratio for Indonesia of 99.7% by 2025.

To achieve this target, the Indonesian government has planned the 35GW program, out of which some 25.0 GW projects will be developed by IPP and 10.6 MW by PLN.

Figure 10:9 35GW Power Generation Program



Source: Japan Oil, gas and Metals National Corporation (JOGMEC) Coal Industry Update, 2016

The program will focus mainly on coal-fired (56% or 19.8 GW) and natural gas (36% or 12.9 GW) projects. The following table exhibits the split between energy source and type of producers for the proposed 35GW power program.

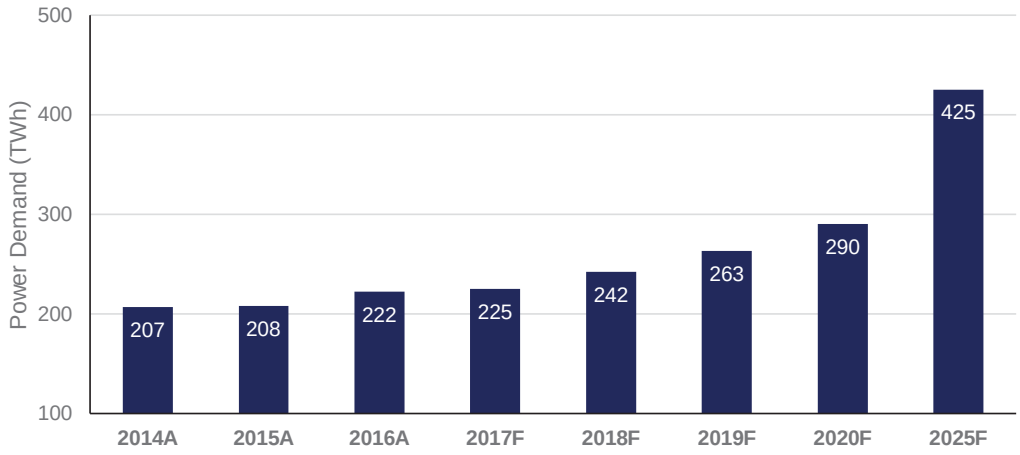
Table 10:3 Indonesia Power Generation – Energy Source

Scheme	Coal	Gas	Hydro	Geothermal	Others	Total (GW)
PLN	2.2	6.8	1.4	0.2	-	10.6
IPP	17.6	6.1	0.6	0.5	0.2	25.0
Total (GW)	**19.8**	**12.9**	**2.0**	**0.7**	**0.2**	**35.6**

Data Source: MEMR

Figure 10:10 exhibits the PLN's forecast of power demand in Indonesia.

Figure 10:10 Indonesia - Power Demand Outlook



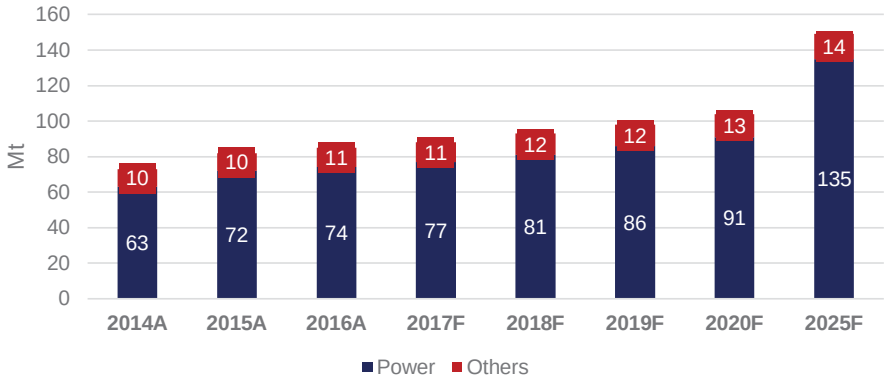
Data Source: PLN

10.6 Domestic Coal Demand

Coal will continue to play a vital role in development of power generation in Indonesia for the next ten years through 2027 due to the relatively lower costs of construction and operation. Mine-mouth power plants (power plants near coal mines) remain integral to the plan, given Indonesia's large lignite coal deposits are often located in remote areas with minimal infrastructure, making transportation of the coal uneconomic. PLN also plans extensive use of LNG for gas-fired power plants. However, because of the relatively higher cost of LNG (compared to pipeline gas) given the need for regasification, PLN plans to use LNG as a peak-load back-up rather than for base-load power plants, particularly for the Java-Bali, Sumatra, and eastern Indonesia networks, where base-load generation may not be sufficient.

While the power capacity has doubled during the 2006 to 2016 period, coal has increased as a proportion of total power capacity, from 10 GW, in 2006 to 28 GW, at the end of 2016. Fossil fuels dominate the power generation mix, accounting for 89% of total generation, with coal generating 56%. Coal demand from domestic industry has risen at an 11% CAGR during the past five years (2011-2016).

Figure 10:11 Indonesia - Domestic Thermal Coal Demand Outlook



Source: Salva Mining

As a result of this, domestic demand for thermal coal in Indonesia has risen at a quickening pace mainly due to the growing number of coal-fired thermal power plants now coming on-line. Because of larger focus on coal-fired generation, Indonesian domestic demand for thermal coal in Indonesia has grown rapidly since 2008. Moving forward, the domestic thermal coal demand in Indonesia is expected to grow at CAGR of 6.8% to 149 Mt by 2025 from 85 Mt in 2016.

In future, this rapid growth in Indonesian domestic demand for thermal coal will ensure that an increasing proportion of Indonesian coal production is retained for domestic consumption as opposed to being exported. The recent ban on export of unprocessed out will also result in construction of domestic processing plant which will result in increase of coal consumption.

The government has also legislated the priority of domestic demand over export demand through the introduction of a Domestic Market Obligation (DMO) which allocates a certain proportion of coal produced to the domestic market first. This ensures that any increase in domestic demand will slow the ability of exports to ramp up quickly.

In addition to the power sector, industries like Cement (PT Semen Gresik (PTSG), PT Indocement Tunggal Prakasa and PT Holcim Indonesia tbk), Pulp and Paper (Asia Pulp and Paper and Asia Pacific Resources International Holdings Limited), Metallurgy (steel-making, foundry cast iron) are the major consumers of domestic coal and their consumption is expected to increase in the future as well.

10.7 Coal Demand in South Sumatra Region

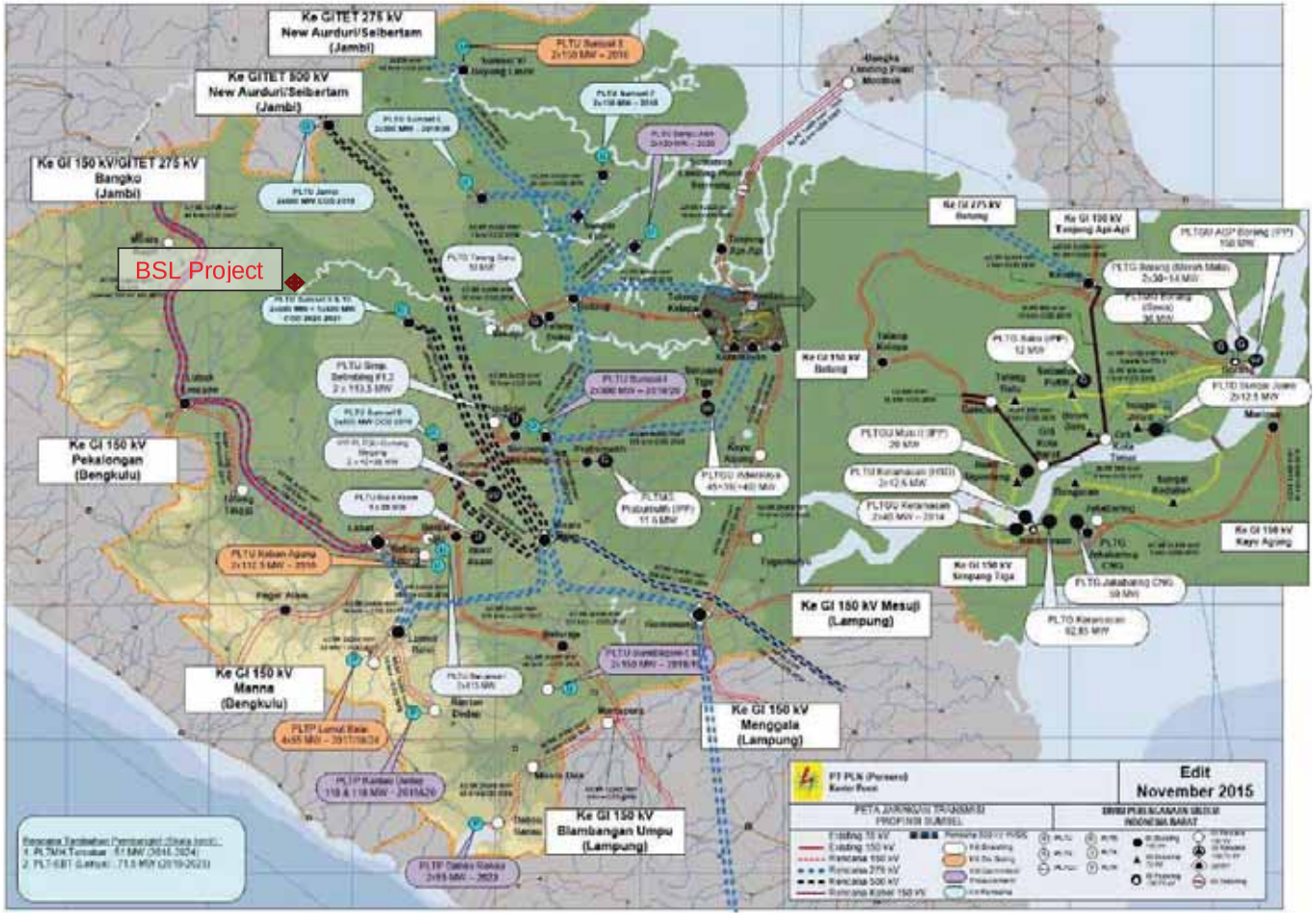
Potential for eventual economic extraction of this Coal Resource has been significantly enhanced by the opportunity to sell this coal into the South Sumatra power industry. PLN is proposing to build 18 coal power plants in South Sumatra along with 10 power plants in Jambi Region (Figure 10:12), which could be supplied by coal from the BSL Project.

Figure 10:12 List of Mine-Mouth Power Plant Proposals as of June 2016

Source: PLN, Daftar Peminat IPP PLTU Mulut Tambang, Juni 2016 [PLN, List of Coal Mine-mouth IPPs' Power Plants, June 2016]

Figure 10:13 shows the location of the BSL project in relation to the planned coal fired power stations and high voltage transmission lines. As seen in the Figure 10:13, PLN is proposing to expand the power generation in the region significantly to meet doubling of demand in next 8 years.

Figure 10:13 Planned Electricity Network, South Sumatra



(Source: PLN 2015)

10.8 Thermal Coal Benchmark Price Forecast

Coal prices continued to decline in value from the peak in 2011 until April 2016, due to limited growth in demand and continued oversupply. Coal prices have recovered significantly since April 2016. The rebound in thermal coal price has been attributed mainly to the following reasons:

- Mine closures in USA, Australia and Indonesia on account of prolonged low-price environment;
- Consolidation of coal mining activity in China by closure of unprofitable mines;
- Limitations imposed by the Chinese government on domestic coal mine operations to restrict them to only 276 days of operations in a year (subsequently changed for selected operations to 330 days operations in a year);
- Steady demand for coal from Asian countries.

Prices has recovered significantly during the past 18 months to the levels last seen in 2013 (Figure 10:14). The surpluses from years of oversupply has evaporating with pickup in demand predominately from South East Asia. The majority of industry experts and brokers are of the opinion that thermal coal prices are likely to stay on improved levels as demand for thermal coal is expected to remain strong from developing countries.

Figure 10:14 Thermal Coal Prices

The strong gain in coal price has incentivised many producers to ramp up their production and recommence mining operations at mines which were placed on care and maintenance previously because they were uneconomical to operate in low coal price environment. In Salva Mining's opinion, long term demand for thermal coal is expected to be robust despite moderating demand from India as more industrialization and urbanization is expected to continue particularly in Southeast Asian economy. Coal as is by far the cheapest source for power generation in these countries.

The table below summarizes the price outlook for the Newcastle Coal Index provided by various coal analyst (data collected and compiled by Consensus Economics Inc.). The data uses the

contractual prices outlook if the Analyst forecast that otherwise spot price outlook by that analyst was used. This data was collected by Consensus Economics Inc. on 11 December 2017 from various Analyst and Brokers.

Table 10:4 Thermal Coal (Newcastle Coal Index) Price Outlook in USD (Nominal and/or Real Term)

Analyst / Broker	2018 (Nom)	2019 (Nom)	2020 (Nom)	2021 (Nom)	2022 (Nom)	Long Term (Nom)	Long Term (Real)
Australia Dept of Industry	76.50	71.75	68.50	68.00	68.00		
BMO	70.00	66.25	65.00	65.00	65.00		
BoA Merrill Lynch	80.00						
Capital Economics	75.75	65.25	60.00				
Commonwealth Bank	82.25	77.00	74.00	75.67	77.37	82.47	67.56
Credit Suisse	81.99	72.75	67.00	63.88		70.02	65.00
Deutsche Bank	82.75	81.00	74.00	75.00			
Econ Intelligence Unit	90.50	87.18	74.65	69.63	68.00		
Euromonitor International	76.97	62.39	68.77	72.32	71.33		
ING Bank	74.00	71.75	69.00				
Investec	92.50	82.50	72.50	65.00		65.00	59.82
Liberum Capital	70.00	65.00	65.00	65.00			
Macquarie	84.99	75.25	72.00	70.13	69.50		
RBC Capital Markets	77.50	70.00	70.00	70.00	70.00	71.77	65.00
UBS	89.00	87.00	82.25	80.25	70.91		60.00
Average	**80.31**	**73.93**	**70.19**	**69.99**	**70.01**	**72.32**	**63.47**

Note: Coal Price forecast are in nominal terms and all in USD apart from Long Term (real)
Source: Consensus Economics Inc., December 2017

Salva Mining has opted to use averages of the banks and various analysts as the forecast prices for the benchmark coal prices for the purpose of this report.

10.9 BSL Coal Price Used for Project Assessment

It is proposed that the ROM coal mined from the BSL Project will be sold at the River Jetty for use in domestic coal fired power plants.

Salva Mining has been advised that PT. BSL has signed MoU for coal sales whereby the coal is proposed to be sold at Palembang Lago Coal Terminal /Gorby Port at price as determined by the HPA/HPB Indonesian coal Index. The coal will be priced on the basis of quality parameters and the gross calorific value of ROM coal on long term contract arrangement.

The BSL Project contains coal with the CV range of 3977 to 4596 kcal/kg. The average predicated product coal quality based on Reserves and life of mine plan for ML, BK and BL block is TM (ar) 34.8%, Ash (ar) 5.0%, CV (gar) 4,132 Kcal/Kg. This coal is comparable to the Adaro's Ecocoal Benchmark (4,200 kcal/kg) which is widely used as a reference point for Indonesia Mid-CV coals.

Coal from various sub-blocks will be sold separately to various customers based on production and customer requirements. Therefore, Salva Mining has opted to forecast the price for BSL coal

relative to Adaro Ecocoal and adjusted the price relative to the Ecocoal benchmark based on energy (CV) difference.

The quality of the BSL Coal is expected to be similar to that marketed by PT. Adaro Energy, Tbk ("Adaro") as Ecocoal, albeit a slightly bit lower CV (1.4% lower than Ecocoal). Therefore, in Salva Mining's opinion, BSL coal should trade at a slight discount to price of Adaro's Ecocoal mainly because of a slightly lower CV. To determine long term price outlook for the BSL coal, Salva Mining has first determined the long-term price outlook for the Adaro's Ecocoal and the price of LRC coal, which was determined from Adaro's Ecocoal price on the basis of pro-rata energy differentials.

To estimate the long-term price for the Adaro's Ecocoal, Salva Mining has adopted the latest brokers and analyst forecasts for thermal coal prices ex Newcastle (US$/t, FOB) as a benchmark thermal coal price. The data which was collected by Consensus Economics Inc. in January 2018 and included forecasts of future prices for coal of CV 6,322 kcal/kg (gar) by various analysts and Industry experts. Salva Mining has adopted an average of these is forecast prices and taken as a reasonable benchmark price.

Utilizing the historical price differential for this type of Indonesian coal over the Newcastle benchmark price, Salva Mining has discounted the long-term benchmark prices to estimate the price for the low rank sub bituminous (higher moisture, lower CV) coal.

Salva Mining notes that the historical price of Adaro's Ecocoal is trading in the range of 53% to 62% of the Newcastle Index over in the past three years. Salva Mining notes that the price differential between the Newcastle coal index and Indonesian low rank coal has decreased in recent times, due to low bulk sea fright rates at present and more and more power plants being designed to operate at these coal blends. At the end of December 2017, Ecocoal was selling at 57% of the benchmark price. In Salva Mining's opinion, over the short to medium term, the price ratio (ratio of Ecocoal's price over Newcastle coal Index) is likely to remain around 57%. Salva Mining has chosen a ratio of 57% of the Newcastle Index to estimate the price of Ecocoal.

Furthermore, to estimate the price of the BSL coal, Salva Mining has opted to apply a further discount/premium on the Ecocoal's forecasted price. The price discount/premium has been taken on the basis of pro-rata energy differentials. The projected discount/premium for coal from various sub blocks within the BSL Mine has been shown in Table 10:5.

Table 10:5 Coal Price Discount/premium, (% to Adaro Ecocoal)

	CV (kcal/kg)	Premium/Discount to Adaro Ecocoal
Adaro Ecocoal	4,200	
ML Block	3,977	-5.3%
BK Block	4,369	4.0%
BL Block	4,596	9.4%

The projected price for the BSL Mine coal has been shown in Table 10:6.

Table 10:6 Coal Price Forecast, US $/t

	2018F	2019F	2020F	2021F	2022F	Long Term
Nominal Terms						
Newcastle Coal Index	80.3	73.9	70.2	70.0	70.0	72.3
EcoCoal 4200	45.8	42.1	40.0	39.9	39.9	41.2

ML Coal 3977	43.3	39.9	37.9	37.8	37.8	39.0
BK Coal 4369	47.6	43.8	41.6	41.5	41.5	42.9
BL Coal 4596	50.1	46.1	43.8	43.7	43.7	45.1
Real Terms						
Newcastle Coal Index	79.4	71.3	66.1	64.4	62.9	**63.5**
EcoCoal 4200	45.2	40.7	37.7	36.7	35.9	**36.2**
ML Coal 3977	42.8	38.5	35.7	34.8	34.0	**34.3**
BK Coal 4369	47.1	42.3	39.2	38.2	37.3	**37.6**
BL Coal 4596	49.5	44.5	41.3	40.2	39.3	**39.6**

Salva Mining has assumed coal prices to remain constant in real term from 2023 onwards (long term price).

SALVA
Mining Consultants

11 Capital Cost

Salva Mining has assumed mining operations to be commenced using contractor's mining equipment. The capital cost and charges for this equipment have been factored in the contractor charges as operating cost. This is an industry standard practice in Indonesia and Australia.

The total capital cost estimate for the ramp-up of the facilities at the BSL Mine including mining, logistics and associated infrastructure is estimated to be US $29.05M which includes a contingency of US $3.79M. A contingency of 15% has been applied to the capital cost estimate. These estimated are considered to have an accuracy of ± 15%.

In addition to the project capital of US $29.05M, Salva Mining has factored 2% of the invested capital apart from land purchase cost as sustaining capital per annum for asset maintenance over the life of mine.

While preparing these estimates, Salva Mining has relied on industry benchmarks, its internal database and expertise, internal studies on the BSL concessions and the previous estimates. Estimates of major infrastructure capital cost elements are based on pre-feasibility studies containing only preliminary engineering designs and can be considered preliminary estimates. However, cost associated with infrastructure facilities is relatively well established as construction and use of these types of infrastructure is quite common in Indonesia.

In line with the standard industry practice, mine closure cost has been taken as annual expense under operating cost estimates rather than as capital cost. The Capital Cost estimates and the basis of its estimation are shown in Table 11:1. The cost estimate was prepared in January 2018 in US dollars ($).

Table 11:1 Capital Cost (Real Terms)

Sr. No.	Particulars	Direct Cost ($M)	Contingency ($M)	Total Cost ($M)
1.1	Land Compensation	6.96	1.04	8.00
1	Land Compensation	6.96	1.04	8.00
2.1	Workshop, Office and Laboratory	1.10	0.17	1.27
2.2	Backup Power Generation	0.40	0.06	0.46
2.3	Coal Handling Equipment	1.00	0.15	1.15
2.4	Accommodation Camp	1.00	0.15	1.15
2.5	Fuel Storage	0.80	0.12	0.92
2.6	Water Supply and Sewage System	0.50	0.08	0.58
2.7	Communications	0.50	0.08	0.58
2	Mine Infrastructure	5.30	0.80	6.10
3.1	Road Upgrade Mine to Port	8.00	1.20	9.20
3.2	Port Stockpile and Jetty	5.00	0.75	5.75
3	Road & Port Facilities	13.00	1.95	14.95
0	**Total Project Cost**	**25.26**	**3.79**	**29.05**

11.1 Basis of Estimation

Basis of estimation for the major cost elements have been given below.

Pricing

The pricing of commodities and the design / supply of equipment are not based on binding contracts. Budget quotations have been used for all major equipment items and capital items which have been obtained from either new quote from a supplier or Salva Mining's internal database. Budget quotations denote indicative pricing provided for specified equipment and material where no commitment is made to provide the equipment or materials at the particular price at a future date. Minor equipment costs have been based on recent quotes on file for similar equipment.

Project Currency and Foreign Exchange

The project capital costs are expressed in United States dollars ($) with the following provisions:

- Costs are based on current market conditions as at end of Q1, 2018;
- Costs submitted in other currencies have been converted to US $. Foreign currency exchange rates applied to the capital cost estimate relative to the US $ are set out as US $1.00 = IDR 13,500; and
- No provision has been made for variations in the currency exchange rates.

Duties and Taxes

Duties and taxes including VAT for the capital items are included in the estimate unless otherwise noted.

11.2 Land Acquisition

The land covering part of BSL Project fall within the land already acquired as part of the project while the remaining land is held by other parties and is used mainly for palm oil plantation.

A total of approximately 2,400 ha of additional land requirement have been estimated over the life of mine for mine pit and waste dumps. Land acquisition costs have been estimated on the basis of US $2,900 per ha for the total requirement for the project (calculated from mine plan).

11.3 Haul Road Upgrade

Haul Road upgrade is progressing and most of the road was already constructed at the time of writing this report. It is estimated that 40 km of road will need upgrade to be able to handle up to 8 Mtpa of coal which is the peak capacity anticipated from the mine schedule.

The estimated cost for haul road upgrade is estimated at US $9.2 M, including a contingency of US $1.2 M. This is considered appropriate for a road suitable for trucks of up to 60 tonne capacity. Haul Road upgrade from BL Block is well advanced at the time of writing this report.

11.4 Port Stockpile and Jetty

Coal product will be dispatched via two different routes.

Coal predominately from BL and BK Block will be trucked ~120 to 150 km away to Gorby Port (South of Jambi province border) where it will be stockpiled and loaded on ocean going barges for trans-shipment using existing contractors' facilities.

Coal predominately from ML Block will be barged in smaller barges (up to capacity of 2,000 t) for a distance of 215 km for unloading at intermediate stockpile and trans-shipment facility at Muara Lematang where it will be stockpiled and loaded on ocean going barges for trans-shipment using existing contractor's facilities.

While the facilities at both Gorby Port and Muara Lematang already exist, Salva Mining has assumed a capital injection to upgrade these facilities. Overall the total estimated cost for port stockpile and Jetty facility including contingency has been taken as US $5.75M, which includes a US $0.75M provision for contingency.

11.5 Other Cost Items

Costs for other minor items are based on Salva Mining's in-house database and typical industry benchmark costs adjusted for the site conditions.

11.6 Mine Reclamation

In line with the standard industry practice, mine closure costs have been taken under operating cost estimates.

11.7 Exclusions

The following items are excluded from the capital cost estimate:

- Refundable taxes and duties;
- Currency fluctuations;
- Lost time due to severe weather conditions;
- Lost time due to force majeure;
- Additional costs for accelerated or decelerated deliveries of equipment, materials and services resultant from a change in project schedule;
- Any project sunk costs including this study;
- Community relations; and
- Owner's risk and exposure.

SALVA
Mining Consultants

11.8 Capital Phasing

Based on the requirement of the project, capital expenditure for the major items has been distributed over the ramp-up period. The capital expenditure over the life of mine is shown in Table 11:2 below.

Table 11:2 Capital Cost Phasing (US $M, Real Terms)

Capital Item	2018	2019	2020	2021	2022	2023	Total
Land Compensation	0.8	0.8	0.8	0.8	1.6	3.2	8.0
Port Stockpile and Jetty	2.3	0.0	1.7	1.7	0.0	0.0	5.8
Coal Handling Equipment	0.2	0.2	0.2	0.2	0.2	0.0	1.2
Accommodation Camp	0.2	0.0	0.2	0.0	0.7	0.0	1.2
Fuel Storage	0.5	0.0	0.0	0.5	0.0	0.0	0.9
Workshop, Office and Laboratory	0.6	0.0	0.0	0.6	0.0	0.0	1.3
Backup Power Generation	0.2	0.0	0.0	0.3	0.0	0.0	0.5
Road Upgrade Mine to Port	2.3	0.0	2.8	1.4	1.4	1.4	9.2
Water Supply and Sewage System	0.3	0.0	0.2	0.1	0.0	0.0	0.6
Communications	0.2	0.0	0.2	0.2	0.0	0.0	0.6
TOTAL	**7.6**	**1.0**	**6.2**	**5.8**	**3.9**	**4.6**	**29.0**

SALVA
Mining Consultants

12 Operating Cost

12.1 Method of Estimation

Overall operating costs are a combination of mining costs, crushing & handling costs, product transportation and general and administrative (G&A) costs.

These costs are based upon information obtained from the following sources:

- Existing contracts;
- Pre-feasibility studies;
- Budgetary quotations;
- Salva Mining projects database; and
- Experience of Salva Mining staff with other similar operations in the region.

Where specific data does not exist, cost allowances have been based upon consumption and operating requirements from other similar properties for which reliable data exists. The operating costs have been estimated and presented with an added contingency allowance of 5% already build in the cost. All costs are presented in real terms (Q1, 2018 dollars). Costs are exclusive of taxes unless otherwise noted. For the purpose of estimation, fuel price delivered to the site and exchanged rate assumed for the purpose of estimation is as followed:

- Fuel Price US $0.75 / litre; and
- Exchange Rate IDR 13,500 / US $.

In Salva Mining's opinion, all operating cost estimates are reasonable at this stage of project assessment given the size and stage of the project.

12.2 Items included in the Operating Cost Estimates

Coal is mined at the BSL Mine by conventional open-pit mining method using truck and excavator combination. It is envisaged to continue the use of mining contractors to exploit coal and overburden. Following cost elements were considered by Salva Mining:

- Land Clearing and Top Soil Removal: Clearing of land and removal of top soil in the process of mining, generally taken on the basis of $/ha of the area;
- Mining – Waste / Overburden: Cost per bcm of waste removed;
- Mining – Coal: Cost per tonne of extracting coal;
- Power cost: Power cost per tonne of coal;
- Labour cost: Cost per tonne towards salary and wages to the company staffs;
- Trucking (Haul to Stockpile): Cost per tonne km to haul to port stockpile using specialist coal haulage trucks;
- Crushing, Port Stockpile and Barge loading: Cost per tonne to crush, store and load barges;
- Barging: Cost per tonne per kilometre to transfer barges; and coal using; and
- Transhipment: Cost per tonne per kilometre for transfer from barge to mother vessel using transhipment facility.

Additional variable operational costs have also been assumed by Salva Mining which includes:

- Environment and Mine Closure: Cost per tonne for all associated expenditure related to environmental approval and reclamation;
- Government Royalties: Cost per tonne for royalty (13.5% of FOB "Barge");

- Local Government Tax; and
- Corporate Overheads.

Costs have been categorised into four different cost types

- Contractor Cost;
- Owner Cost;
- VAT; and
- Local Government cost and Royalties.

12.3 Contractor Costs

Salva Mining has assumed all contractor cost to be variable in nature. Variable contractor cost is the type of cost which typically varies with the changes in minable quantities and strip ratio. The variable contractor cost is generally based on unit contract rates where a rate is specified for a number of physical quantities which are physically measured on a periodic basis including area cleared, waste mined etc. These types of contracts are generally in practice across entire coal mining Industry. Salva Mining has assumed a contract mining operation in all the pits. Salva Mining's estimates are based on current contracts already in place at the mine, firm quotes, pre-feasibility studies and budget quotes.

Salva Mining notes that there is a significant downward revision in contract mining quotes and new rates are more competitive. Salva Mining has assumed unit rates that are considered to be sustainable for both contractors and mine owners in the long term. Salva Mining has compared these against the industry benchmarks and estimated these to be reasonable. Table 12:1 below shows the contractor unit rates.

Table 12:1 Contractor Unit Rates (Real Terms)

Cost Item	Unit	Rate
Land Clearing	$/ha	1,600
Waste Mining	$/bcm	1.70
Waste Haulage beyond 1000m	$/bcm/km	0.30
Coal Mining	$/t	0.75
Haul to Port Stockpile – Road	$/t km	0.08
Barging – Small Barges	$/t km	0.05

Note: All quoted cost in local currency is adjusted for fuel price and exchange rate

12.4 Owner Costs

Salva Mining has assumed all owner cost to be variable in nature. Variable owner costs vary with the changes in physical quantities in the mine plan and are incurred by the company directly.

Salva Mining's estimates are based on current costs at the mine and pre-feasibility studies. The cost was compared with actual costs from other operations and then adjusted for the conditions and processes on the site. Salva Mining has determined these to be comparable against the industry benchmarks and estimated these to be reasonable. Table 12:2 below shows the owners unit rates.

Table 12:2 Variable Owner Unit Costs (Real Terms)

Cost Item	Unit	Rate
Unloading Small Barges	$/t	0.25
Crushing, Stockpile and Barge Loading	$/t	0.75
Mine Closure	$/ha	3,200
Environmental and Rehabilitation	$/t	0.20
Salary and Wages	$/t	0.20
Corporate Overheads	$/t	0.40
Local Government Fees	$/t	0.20

12.5 VAT

VAT is attributable on the variable component of contractor cost only. However, Salva Mining has taken a conservative approach and assigned a 10% VAT on all contractor costs rather than variable component only.

12.6 Royalties and Government Costs

The royalty is generally levied as percentages of sale proceeds to be applied for the different types of coal depending on its GCV and method of mining. However, different royalty rates have been adopted for different types of ownership structure which include: Contract of Work holders (CoWs) Coal Contract of Work holders (CCoW) Izin Usaha Pertambangan holders (IUP) and Izin Usaha Pertambangan Khusus holders (IUPK).

A royalty of 13.5% of revenue is applicable to coal sales from the BSL concession. This amount is defined in the PKP2B and subsequent agreements between BSL and the Indonesian government. Regulation No. 17 of 2010 issued by the Minister of Energy and Mineral Resources (MEMR) also requires that all coal sales be made at a minimum (or benchmark) price that is defined by the Indonesian government on a monthly basis. The methodology for calculation of the minimum price is described in Regulation No. 515.K/32/DJB/2011 and Regulation No. 644.K/30/DJB/2013 issued by the Directorate General of Minerals and Coal (DGMC).

Salva Mining assumed that future benchmark prices will be equal to or lower than the forecast prices used in this study and thus the forecast coal price has been used for the calculating royalty payments. In additional to the royalty rate of 13.5%, Salva Mining has also applied a provision of $0.25/t towards local government costs.

12.7 Overall Operating Cost

Total operating costs per tonne of coal product including royalty for the BSL Mine has been estimated as $31.62/t over the life of the mine. The cost components for the different heads have been given in Table 12:3 below.

SALVA Mining Consultants

Table 12:3 Average Unit Operating Cost (Real Terms) over Life of Mine

Cost Item	$/t
Land Clearing	0.01
Waste Mining	10.54
Waste Haulage	0.32
Coal Mining	0.75
Haul to Inter. Stockpile - Road	7.29
Haul to Inter. Stockpile - Small Barge	4.36
Unloading (smaller Barge)	0.10
Stockpile and Large Barge Loading	0.75
Mine Closure	0.03
Environmental and Rehabilitation	0.20
Salary and Wages	0.20
Corporate Overheads	0.40
Local Government Fees	0.20
VAT	2.25
Operating Cost Excl. Royalty	**27.40**
Royalty	4.22
Operating Cost Incl. Royalty	**31.62**

Salva Mining has compared these against the industry benchmarks and estimated these to be reasonable.

SALVA Mining Consultants

13 Financial Analysis & Project Valuation

The BSL Mine as an operating mine undergoing expansion as such, in Salva Mining's opinion, it is appropriate to use the discounted cash flow (DCF) method to determine the technical value of the project. In the forming over opinion of valuation, Salva Mining has not applied any premium or discount to the technical value to determine the market value on the basis of strategic, market related or any other special factors.

13.1 Modelling Methodology & Considerations

The valuation model for the BSL Mine was developed in Microsoft Excel. Valuation has been derived from analysis of cash flows calculated for the project over the life of mine. The valuation was designed so that input parameters could be varied to investigate different scenarios to determine an estimated valuation range. Salva Mining has adopted the following considerations in its financial model:

- The model is developed in nominal terms. All cost and prices were considered in real terms and then converted to nominal terms;
- The model assumes continuous cash in and outflows, which are reflected in mid-point discounting during a period;
- Cash flows was developed on stand-alone project basis;
- Sunk cost (including acquisition costs) is excluded; and
- All future cash flows were discounted using WACC.

13.2 Base or Preferred Case

A base case valuation was developed using the assumptions discussed in various section of this report. Key inputs are summarised in Table 13.1 below.

Table 13:1 Preferred Case – Key Input Parameters

Key Parameters	Description	Unit	Value
Peak Production capacity	Maximum annual production capacity	Mtpa	10.0
Life of Mine Considered	Years of coal production	years	25
Discount Rate	Discount rate (nominal terms)	%	11%
Corporate Tax Rate	Indonesian corporate tax rates	%	25%
BSL Coal Price	Aver. price for BSL Coal (real terms)	$/t	35.74
Capital - Project	Total project capital expenditure (real terms)	$M	29.0
Capital - Sustaining	Ongoing replacement capital (real terms)	$M	9.3
Coal Mined	Coal mined over life of mine	Mt	194.6
Stripping Ratio	Aver. ratio of waste: coal	bcm:t	6.2x
Waste Mined	Waste mined over life of mine	Mbcm	1207
Operating Cost Excl. Royalty	Aver. operating cost (real terms)	$/t	27.40
Royalty	Aver. royalty (real terms)	$/t	4.22
Operating Cost Incl. Royalty	Aver. operating cost including royalty (real terms)	$/t	31.62

SALVA Mining Consultants

Table 13:2 Preferred Case – Financial Model

Item	Units	LOM	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Coal Mined	Mt	194.6	1.0	2.0	4.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	6.0	3.6
Waste Mined	Mbcm	1206.9	5.5	11.0	22.0	33.0	33.0	33.0	33.0	48.0	48.0	48.0	60.0	60.0	60.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	39.0	23.4
Stripping Ratio	bcm:t	6.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	6.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Product - BSL Coal	Mt	194.6	1.0	2.0	4.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	6.0	3.6
Revenue	$M	9719.9	50	92	167	248	248	256	262	351	359	368	464	475	487	499	506	495	507	519	531	544	557	570	584	359	221
Total Capital	$M	44.2	7.7	1.2	6.7	6.6	4.7	5.7	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Operating Cost	$M	7560.3	25	51	106	162	165	169	173	245	251	257	337	345	353	376	396	421	432	442	453	464	475	486	498	298	185
Royalty	$M	1145.4	6.8	12.5	21.0	30.3	30.2	31.2	32.0	40.2	41.2	42.2	55.1	56.4	57.8	59.1	59.9	58.3	59.6	61.1	62.5	64.0	65.6	67.1	68.8	38.1	24.5
EBITDA	$M	1014.2	18.5	29.3	40.2	55.8	53.3	56.5	57.9	65.3	66.9	68.5	72.4	74.1	75.9	63.3	50.2	15.9	15.4	15.7	16.1	16.5	16.9	17.3	17.7	23.1	11.4
Cash Margin	0	159.3	18.5	14.6	10.1	9.3	8.9	9.4	9.6	8.2	8.4	8.6	7.2	7.4	7.6	6.3	5.0	1.6	1.5	1.6	1.6	1.7	1.7	1.7	1.8	3.9	3.2
Depreciation	$M	35.4	0.3	0.4	0.6	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.2	2.5	3.2
Corporate Tax	$M	244.7	4.6	7.2	9.9	13.7	13.1	13.9	14.2	16.0	16.4	16.8	17.8	18.2	18.6	15.5	12.2	3.6	3.5	3.5	3.6	3.7	3.7	3.8	3.9	5.2	2.1
EARNING AFTER TAX	$M	734.1	13.7	21.6	29.8	41.2	39.2	41.6	42.5	48.1	49.3	50.5	53.4	54.6	55.9	46.5	36.6	10.8	10.4	10.6	10.8	11.0	11.2	11.5	11.6	15.5	6.2
Depreciation	$M	35.4	0.3	0.4	0.6	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.2	2.5	3.2
Working Capital Adj.	$M	0.0	-2.9	-2.1	-4.3	-5.0	0.1	-0.6	-0.3	-6.2	-0.5	-0.5	-3.1	-0.7	-0.6	0.5	0.8	2.8	-0.5	-0.6	-0.5	-0.6	-0.6	-0.6	32.5	-27.3	20.7
Capital Expenditure	$M	44.2	7.7	1.2	6.7	6.6	4.7	5.7	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Unlevered Cash Flow	$M	725.3	3.4	18.8	19.3	30.6	35.6	36.4	42.9	42.6	49.4	50.6	50.9	54.7	56.0	47.8	38.2	14.5	10.8	11.0	11.4	11.5	11.9	12.2	45.6	-10.1	29.3
Discounted Cash Flow	$M	265.5	3.2	16.1	14.9	21.2	22.3	20.5	21.8	19.5	20.4	18.8	17.0	16.5	15.2	11.7	8.4	2.9	1.9	1.8	1.6	1.5	1.4	1.3	4.4	-0.9	2.3
Cumulative DCF	$M	265.5	3	19	34	55	78	98	120	139	160	179	196	212	227	239	247	250	252	254	256	257	258	260	264	263	265
NPV	$M	265.5																									

Preferred Case Results

Financial Model for the preferred case is shown in Table 13:2. The results of the preferred case valuation scenario are shown in Table 13:3 below.

Table 13:3 Preferred Case – Financial Outputs & Valuation

Financial Summary (Nominal Terms)	$ M
Revenue	$9,720
Operating Cost	$7,560
Royalties Payment	$1,145
Corporate Tax Expenses	$245
Total Capital (including Sustaining Capital)	$44
Cumulative Free Cash Flows	$725
Net Present Value (NPV)	**$265**

Under the preferred case of using a nominal discount rate after tax of 11%, the Project NPV is determined as US $265M. The Project cash streams are shown in Figure 13:1 while discounted and cumulated discounted cash flows is indicated in Figure 13:2.

Figure 13:1 Cash Streams – Preferred Case

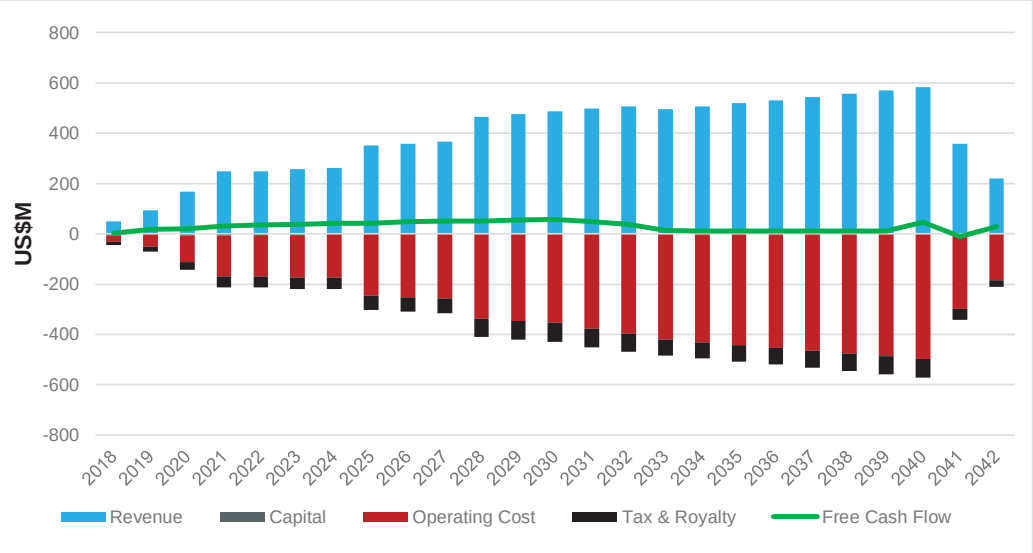
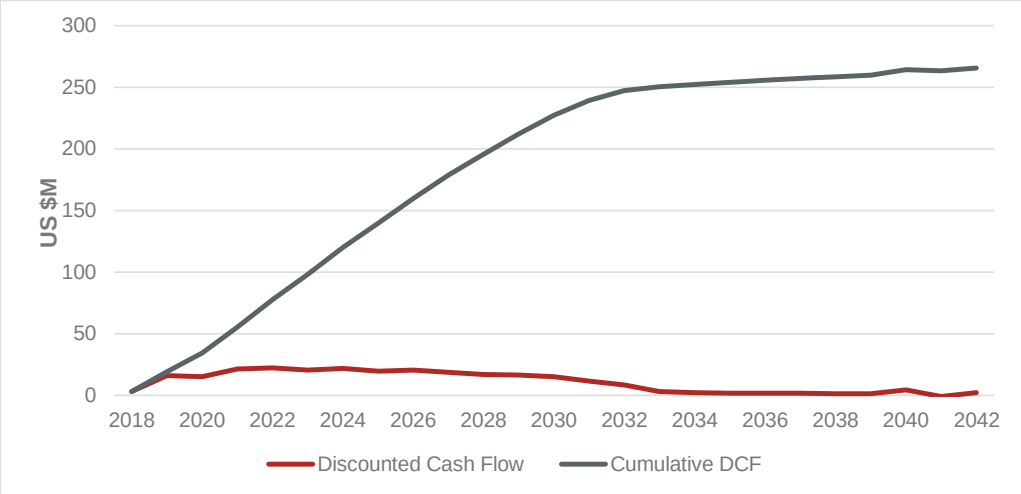


Figure 13:2 Discounted Cash Flow Profile



Sensitivity Analysis

Sensitivity of the project was assessed for key parameters like sales price, discount rate, operating cost and capital cost. Figure 13:3 exhibits the project sensitivities.

Figure 13:3 Key Project Sensitivities

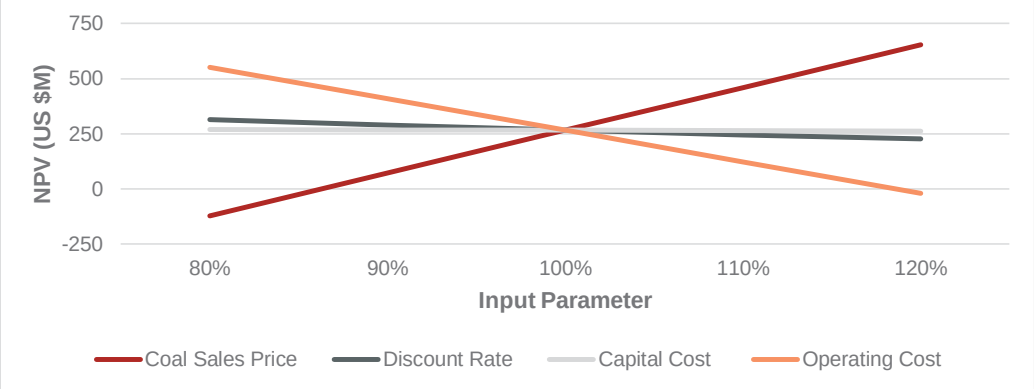


Table 13:4 outlines the impact of project NPV for change in the input parameters.

Table 13:4 Project Sensitivity

Key Input Variables	Change in Input Parameter (%)				
	80%	90%	100%	110%	120%
Coal Sales Price	-122	72	265	459	653
Discount Rate	315	288	265	245	227
Capital Cost	269	267	265	264	262
Operating Cost	552	409	265	122	-21

As seen in the Table 13:4, the BSL Mine is most sensitive to coal sales price followed by change in operating cost.

13.3 Valuation Range

In order to determine the range of valuation estimates (low and high scenarios), a range of key inputs in the financial model were selected to reflect upper and lower values that are considered reasonable by Salva Mining for key input assumptions. To determine low case valuation, coal price was decreased by 3% along with 3% increase in capital and operating cost. In case of high case, price was increased by 3% along with 3% reduction in capital and operating cost. The input parameters assumptions for the low and high range are shown in Table 13:5.

Table 13:5 Valuation Range - Input Parameters

Case	Key Input Parameters	Unit	Valuation Input
Low	Aver. Price – BSL	$/t	34.67
	Operating Cost ex royalty (Real Terms)	$/t	28.22
	Project Capital Cost (Real Terms)	$M	29.92
Preferred	Aver. Price – BSL	$/t	35.74
	Operating Cost ex royalty (Real Terms)	$/t	27.40
	Project Capital Cost (Real Terms)	$M	29.05
High	Aver. Price – BSL	$/t	36.81
	Operating Cost ex royalty (Real Terms)	$/t	26.58
	Project Capital Cost (Real Terms)	$M	28.18

The results of the analysis for the low and high cases are shown in Table 13.6 below.

Table 13:6 Sensitivity - NPV

Key Outcomes	Unit	Valuation Range (US $M)	
		Low	High
Net Present Value (after Tax)	$M	**164**	**367**

Therefore, the valuation of the BSL Project based on income based approach is derived in the range of US$164M to US$367M with a preferred value of US$265M (Table 13:7).

Table 13:7 Valuation Range – Income Based Approach

Key Outcomes	Unit	Valuation Range (US $M)		
		Low	Preferred	High
Valuation – Income Based Approach (100% project basis)	$M	**164**	**265**	**367**

13.4 Second Valuation Approach – Market Comparable Transaction Method

Salva Mining has considered market comparable transaction method as the secondary valuation method to assess value of the BSL Project.

To determine the fair market value for the BSL project, Salva Mining has reviewed recent market transactions for coal projects Indonesia. To find out implied value relevant to current time and circumstances, Salva Mining has considered only those recent transactions involving sale and purchase of coal projects with delineated reserves and the project is either in advance construction stage or just started production on small scale.

Salva Mining identified ten (10) transactions involving sale and purchase of coal assets similar to that of BSL concession. These transactions have been detailed in Table 13:8.

Table 13:8 Market Comparable Transactions

Date	Project	Buyer	Seller	Location	Interest %	100% Valuation of Asset (US$M)	Total Reserves (Mt)	Coal Rank	GCV (kcal/kg, GAR)	Implied Value US$/t of Reserve
Nov-17	Tepian Indah Sukses (TIS)	Banpu	PT Tepian Indah Sukses	East Kalimantan	70.0%	9.5	4.7	High CV	6000	2.9
Nov-16	Surya Tambang Tolindo (STT)	Geo Energy	PT Surya Tambang Tolindo	Sumatra	100.0%	2.0	0.8	High CV	7000	2.5
Jul-16	PT Tanah Bumbu Resources (TBU)	Geo Energy	International Resources Limited	South Kalimantan	98.7%	90.0	45.6	Low CV	4200	2.0
Jun-16	PT Parisma Jaya Abadi and PT Cahaya Lembusuana (PJA)	PT Autum Bara Sejahtera	Geo Energy	East Kalimantan	89.7%	11.1	3.5	High CV	6700	3.6
Jun-16	Indomet	Adaro Energy	BHP	Central Kalimantan	75.0%	160.0	4.4	Coking Coal		48.5
Feb-16	Parisma Jaya Abadi (PJA)	Geo Energy	Borney Bara Resources	East Kalimantan	79.9%	22.5	3.4	High CV	6700	8.3
Dec-15	Sungai Danau Jaya Project	Geo Energy	Sungai Danau Jaya	South Kalimantan	34.0%	73.5	42.4	Low CV	4200	5.1
Sep-12	Piranti Jaya Utama	PT United Tractors	PT Borneo Berkat Makmur	Central Kalimantan	60.0%	85.0	45.0	Low CV	4700	3.1
Jul-12	PT Ganda Alam Makmur (GAM)	LG	PT Ganda Alam Makmur	East Kalimantan	60%	354.3	275	Medium CV	5500	2.1
Mar-12	Mitra Energi Agung (MEA)	PT Indika Energy	Asia Thai Mining	East Kalimantan	60%	27	40	Low CV	4500-5600 kcal/kg (gar)	1.1

During Nov 2017, Banpu acquired 70% interest in the Tepian Indah Sukses (TIS) project with 47 Mt of Reserve for US$9.5 Million (implied value of $2.89/t of Reserve). The TIS project is adjacent to the Banpu's existing Trubaindo Coal Mining (TCM) in East Kalimantan and it was proposed that the project will utilise existing TCM infrastructure. Compared to BSL, TSL is a superior project due to the coal quality (High CV Thermal vs. Medium CV Thermal Coal) and adjacent to existing operating mine.

SGX listed Geo Energy completed the transaction involving the Surya Tambang Tolindo (STT) project in November 2016. The considering was $2M for 100% interest with implied value of $2.5/t of Reserve based on Geo Energy reported Coal Reserves of 0.8 Mt of high CV thermal coal. The project is located in Sumatra.

Indomet project was sold by BHP to Adaro in June 2016 with an implied value of US$48.5/t of Coal Reserves. Indomet project has a significantly larger coal resource base but with a very small defined Coal Reserve of coking coal. Compared to BSL, Indomet is undoubtedly a superior project due to the coal quality (coking coal vs. Medium CV Thermal Coal). Salva Mining considers this to be not directly comparable with the BSL project.

SGX listed Geo Energy acquired the Parisma Jaya Abadi (PJA) project from Borney Bara Resources in February 2016 at an implied value of US$8.2/t of Coal Reserves. This was subsequently sold by Geo Energy to PT Autum Bara Sejahtera in June 2016 at an implied value of US$3.6/t of Coal Reserves as it was considered 'non-core'. PJA project is a small-scale project with a Reserve of only 3.5 Mt (reporting standard is unknown) with an estimated calorific value of 6,700 to 8,100 kcal/kg (High CV Thermal). Salva Mining considers this to be not directly comparable to the BSL project due to the coal quality and size of Coal Reserves.

PT Tanah Bumbu Resources project (TBU) was acquired by Geo Energy in July 2016 from International Resources Limited with an implied value of $2.0/t of Coal Reserves. In Salva Mining's opinion, PT Tanah Bumbu Resources project (TBU) appears to be the closest comparable project to the BSL project as both of the projects contained coal of similar grade and calorific value (~4200 kcal/gar). Similar to the BSL Project, the TBU was also scheduled to commence production in short term. In terms of mining operation both BSL and TBU is planned to be mine by conventional open-pit method with similar strip ratio (3-5 bcm/t). Furthermore, as per the announcement made by Geo Energy, most of the necessary permits to commence mining operation at TBU was already been secured. However, in Salva Mining's opinion, TBU project is slightly superior to the BSL project despite of less Reserve base mainly because of its location (established mining province of South Kalimantan), closure to the coast and ease of barging. Additionally, TBU was located close to the Geo energy's exiting PT Sungai Danau Jaya (SDJ) mine bringing opportunity for synergy and economics of scale.

Geo Energy acquired PT Sungai Danau Jaya (SDJ) mine in December 2015 at an implied value of US$5.1/t of Coal Reserves. SDJ concession is only 17 km from the coast in South Kalimantan. Production at SDJ was immediately started with a production of 55,000 tonnes per month. Mining at SDJ was relatively simple with low strip ratio. Prior to the acquisition, all necessary infrastructure to haul coal was already in place. SDJ was targeted to produce 6 Mtpa coal. In Salva Mining's opinion, SDL project was a superior project as compared to BSL due to higher production and close proximity to coast and should be valued at a higher rate.

PT Piranti Jaya Utama Project (PJU) was acquired by United Tractors in September 2012 (Implied value of US$3.1/t of Coal Reserves). The concession is estimated to hold total reserves of 45 Mt of coal (reporting standard is unknown), with a calorific value of 5,400 kcal/kg. At the time of acquisition, PJU was a greenfield concession covers an area of 4,800 ha and is administratively located in Barunang village, Kapuas Tengah district, Kapuas regency. In Salva Mining's opinion, the PJU project implied value is not directly comparable as it was purchased at a time of bullish coal market and maybe as a part of market entry strategy by United Tractors to enter coal mining.

PT Ganda Alam Makmur (GAM) project was acquired by LG in June 2012 with an implied value of $2.0/t of Coal Reserve. It was a relatively advanced project and at on verge of large scale production at the time of transaction. GAM is located in East Kalimantan Province of Indonesia and amenable to be exploited by open pit mining method. Mined out coal was planned to be trucked approximately 22 km to the company's barge loading facility on the Pengadan River. The project had a reported Coal Reserve base of 275Mt (Reporting standard unknown), which all necessary infrastructure in place to support production of up to 12 Mtpa. Compared to BSL, in Salva Mining's opinion, at the time of acquisition, GAM project was a superior project and should be valued at higher rate as compared to BSL Project.

In Nov 2012, Indika Energy acquired an indirect 60.0% stake in Mitra Energi Agung (MEA), a greenfield coal asset located in East Kalimantan with a IUP concession area covering 5,000 hectares. More than 90% of the MEA concession was explored and 40 Mt of Coal Reserves (Reporting Standard unknown) was delineated. This transaction was completed at an implied value of US$1.1/t of Coal Reserves. Compared to BSL, MEA was located closer to the coast in the established mining province of East Kalimantan albeit its Reserve base is significantly smaller. In terms of coal quality, both BSL and MEA had similar calorific value. In terms of project development, BSL is relatively advance project under commissioning stage with a planned production in 2017 whereas MEA project was still at the study stage. Furthermore, at the time of acquisition, some of the necessary licenses to commence coal mining were not been granted at MEA. Therefore, in Salva Mining's opinion, MEA is an inferior project and should be valued at a slightly lower rate.

Considering the location, geological, mining, logistic and other micro and macro-economic factors which could affect the project economics for the BSL project, in Salva Mining's opinion the implied value of delineated Coal Reserves within the BSL projects should be in the range of $1.10/t (implied value of MEA transaction) to $1.50/t of Reserves (implied value derived from 25% discount to implied value of TBR transaction) with a preferred value of $1.30/t of Reserves. This valuation range can be considered appropriate for the project at its this stage of development.

Therefore, based on market transactions, the valuation of the BSL Project is in the range of $195M to $267M with a preferred value of $231M is deemed appropriate. A summary of Salva Mining's market based valuation is presented in Table 13:9.

Table 13:9 Market Based Valuation Range

Item	Market Value (US$M)		
	Lower	Preferred	Upper
Implied Valuation, $/t ROM Reserve, Market Based	1.10	1.30	1.50
Implied Valuation, (US$ M), Market Based – 100% Project Basis	**195**	**231**	**267**

14 Valuation Summary

In Salva Mining's opinion, the preferred value derived from the Income based approach is within the acceptable range of the preferred value derived from comparable market transactions range.

Salva Mining has used the average value derived from these two approach as its opinion on the value of the BSL project.

Salva Mining has estimated the valuation of the BSL concession using the assumptions and inputs detailed in this report. Salva Mining's opinion of the technical value and thus the project value (on 100% basis) as at 31 December 2017 is shown in Table 14:1 below, which takes into account the high and low cases and the sensitivity of the project.

Table 14:1 Valuation Summary – BSL Project, 100% Basis

Item	Market Value (US $M)		
	Lower	Preferred	Upper
Valuation, Income Based	164	265	367
Valuation, Market Based	195	231	267
Valuation, Selected (BSL, 100% Project)	**180**	**248**	**317**

14.1 Previous Valuation

The BSL South Project was previously valued in April 2017 by Salva Mining. The current valuation incorporates higher coal price forecast offset by a slower conservative production ramp up compared to the previous valuation.

Table 14:2 below shows a breakdown of the difference in key input parameters and resultant valuation.

Table 14:2 Valuation - Comparison with Previous Estimate

Valuation Parameter	Unit	Salva Mining Dec-17 US$M	Salva Mining Apr-17 US$M
Coal Reserves	**Mt**	194.6	194.6
Average Coal Price	**US$/t**	35.74	35.09
Average Operating Cost (ex. Royalty)	**US$/t**	27.40	27.19
Average Cash Margin	**US$/t**	8.34	7.90
Discount Rate	**%**	11.0	11.0
Valuation – BSL South Project	**US$M**	**248**	**237**

15 Risk Factors & Opportunities

Salva Mining has identified a range of risk elements or risk factor which may affect the future operations and financial performance of the BSL Mine. Some of the risk factors are completely external, which is beyond the control of management. However, the project specific risk can be mitigated by taking proper measure in advance. Key Project risks that have been identified are discussed below.

15.1 Project Risks

Resources and Reserves

Although the majority of coal included in the Life of Mine Plan contains Proved and Probable Reserves which was modelled from Measured and Indicated Resources respectively, a total of 19% of the coal in the pit shell is classified under "Inferred Resources within optimized pit shell due to the lack of core samples and quality analysis.

Therefore, to mitigate the risk associated with the inclusion of Inferred Resources within optimized pit shell and to be on conservative side, Salva Mining has scheduled total minable tonnes to be equal to the quantity of Proved and Probable Reserves only. In Salva Mining's schedule, the cumulative tonnes to be mined over the life of mine do not exceed the total Coal Reserves.

However, it is still considered possible that further exploration and technical studies may result in a reduction or an increase of Reserves which would have some impact on the value of the concession.

Geotechnical Risk

Although the design of pit slop angles has been based on Geotechnical studies that undertaken for the BL and ML blocks in the BSL concession, but these studies are considered to be preliminary in nature. These studies were used to assess the general relationship between pit depth and overall slope angles for pit high walls.

Although Salva Mining has taken an appropriate factor of safety by maintaining a large offset in the pit design, further detailed geotechnical analysis is recommended for the final pit designs to ensure that there is an adequate factor of safety for the actual pit designs.

Coal Price Risk

Coal prices and the demand for coal are cyclical in nature and subject to significant fluctuations, and any significant decline in the prices of coal or demand for coal could materially and adversely affect the Company's business and financial condition results of operations and prospects. Coal markets are highly competitive and are affected by factors beyond the Company's control which include but not limited to:

- Economic conditions in Indonesia and globally;
- Government actions; and
- Fluctuations in industries with high coal demand such as Power Sector and other industries using thermal coal.

Although sufficient analysis and studies have been conducted to ascertain future long term forecasts, if there is a fall in long term prices there would be a substantial reduction in the value of the project. While it is unlikely that the project will become uneconomic as it is considered to be a relatively low cost producer, the reduction in long term price will adversely affect the coal reserves estimates and may cause reduction in production target and pit design.

Impact on Weather on Production

Sumatra has tropical climate with a high rainfall. During rainy season, weather is expected to impact on the mining production due to the project being an open-pit mining operation. However, this has been factored into account for potential weather related impacts by having a provision of sufficient coal stockpiles.

Expansion and Infrastructure Associated Risk

Ramping up production to 10 Mtpa requires mobilisation of large amounts of mobile equipment and logistics facilities. The ability to achieve the target production expansion has significant impact on the valuation of the project.

While a reasonable timeframe has been allowed for obtaining approvals and design and construction of this infrastructure, the construction of new facilities and expansion of production may exceed the currently envisaged timeframe cost for a variety of reasons both within and outside the control of the Project's management. These may include delays in obtaining approvals, construction of mine infrastructure, delivery of new equipment, site establishment, recruitment of the workforce and many others.

Mining Approvals, Tenure and Permits

A number of government permits and approvals are required to facilitate expansions of the BSL Mines and the associated infrastructure facilities. Any delays in obtaining the required approvals may affect the production expansion and the mine plan. This may likely to cause the project to overrun which may significantly affect project capital and operating costs.

The risk associated with the tenure of concession is considered to be significantly lower than many other nearby mines, as the tenure is held under a 2nd generation PKP2B that is valid for close to the entire planned mine life. The company must be studious in complying with all conditions of the contract to ensure that they maintain tenure and a good relationship with regulatory organisations.

Land Acquisition

Most mining operations in Indonesia are facing issues in acquiring land for their projects. Acquiring land and compensating land owners is considered to be a significant issue, especially in areas which are densely populated.

In order to achieve the value estimated in this study, BSL will need to identify key land owners in advance so that an appropriate settlement can be reached and no interruptions to the development of the project will occur. Land compensation will be required for mining areas, dumping areas and infrastructure construction. Salva Mining is not aware of any specific land compensation issues with the BSL concession at the current time that may affect this valuation. However, it is considered possible that delays to land compensation and associated interruptions to the project may occur in the future and that this may have a material impact on the value of the concession.

Environmental and Social Risks

While environmental and social risks have been identified and management plans are in place, it is possible that failure to comply with the environment criteria or failure to maintain good relationships with the local community will have an impact on project value. These risks are not considered to be greater for the BSL Mine than for other operating coal mines operating in Indonesia.

Operational and Mine Safety

Mining operations at BSL concession operates in accordance with applicable laws and currently acceptable industrial practices. In addition, it conducts its operations in a responsible manner with regard to occupational and mine safety.

The project is subject to Indonesian laws and regulations regarding occupational and mine safety, which means that there are potential liability risks. Coal producers who fail to comply with safety regulations will be subject to penalties, including fines and suspension of the mining permit for the mine.

The proposed coal mining operations will be subject to several operational risks such as contractor performance, poor mining practice which may increase strip ratio, equipment failure, accidents etc. These unforeseen events have the potential to result in being unable to meet production targets and it can potentially increase cost of production.

Operating and Capital Costs Estimates

Most of the operating cost items considered for economic assessment are based on the actuals being achieved at the operations. Since 2012, many contracts have been renegotiated at much lower rates and new contracts are more competitive. While Salva Mining has assumed unit rates that are considered to be sustainable for both contractors and mine owners in the long term, any occurrence of operating costs higher than the forecast costs would have a significant impact on the value of the BSL Mine. To mitigate the risk associated with future price escalation, Salva Mining has allowed a suitable contingency in preparing the estimates.

Capital expenditure estimates are considered to be preliminary estimates based and is not based on detailed engineering design. These estimates depend on many factors and can be affected by a wide range of changing circumstances. These can vary from the worldwide demand for specific materials and components like steel, rubber, parts manufactured predominantly in certain parts of the world.

While the estimates are considered to be conservative, Salva Mining has factored a contingency of 15% to its capital estimate. Any increase in actual capital costs will have a significant impact on project value.

Human Resources

The BSL Mine is planned to expand rapidly over the next 3 years, and as such there will be a need to attract and retain key personnel critical to achieving the planned production. The demand or mining and construction personnel are usually cyclical in nature and depending on the phase of the cycle it may be difficult to attract sufficient numbers of professionals to fulfil the demand. The failure to recruit sufficiently qualified staff could affect many aspects of future performance including

operations, finance, community and government relations marketing and planning. If the company cannot attract, train and retain qualified managers, the company may be unable to successfully manage its growth or otherwise compete effectively in the coal industry.

A shortage of skilled labour in the Indonesian mining industry could result in the company having insufficient employees or contractors to operate its business efficiently. Similarly, industrial action by the employees of either the company or mining contractors could negatively impact planned production and consequently financial performance.

Political and Regulatory Risk

Since 2009, Indonesian mining has been governed by the Central Government's "New Mining Law", enacted to provide greater opportunity for the industry to expand to meet growing Asian demand. The Mining Law aimed to reflect the Government of Indonesia's ("GoI") desire to recognise the financial benefits of its own natural resources, by ensuring that the GoI had greater input into resource extraction. The major developments from the 2009 Mining Law have been the Domestic Market Obligation (DMO) and Export Benchmark Pricing (HBA).

Some future regulations may include a coal export tax or ban on certain qualities, stricter coal road transportation rules and alignment of IUP and CCOW royalty rates. The actual implementation of these new aspects of the law is still unclear and many contract holders are currently in negotiation with the Indonesian government regarding this issue. Issues likes DMO, Coal upgrading requirements, Export taxes, Minimum Pricing Regulations and Foreign Ownership Restriction of the new law may affect the valuation of the BSL concession.

In our view, the likelihood of these being implemented is minimal. The value-adding requirement for mineral exports in Indonesia, enacted on 1 January 2014, which has had broad implications for the metals sector, is not applicable to the coal sector and so has had no apparent effect on coal industry.

15.2 Key Opportunities

There are a number of options that the BSL Mine may consider to reduce operating costs at their concession. These have not been incorporated into this study as there is insufficient engineering design and confidence in the suitability, operating and capital costs for such options. Further investigation and technical work on these options is currently underway and may allow for their inclusion in future valuations. Potential opportunities for improvement include:

- Potential to mine additional "Inferred Resources within optimized pit shell" or upgrade the Inferred Resources to Indicated or Measured Resources and convert these to Ore Reserves by a study at Pre-Feasibility level and subsequently mine these additional reserves.
- Deployment of large size excavator with matching trucks;
- In pit crushing and conveying for waste mining and hauling;
- Use of larger shovels and matching trucks.

References

Bloomberg Bond Yield, Jan 2017, [viewed 20 Jan 2017], <http://www.bloomberg.com/news/2014-01-07/indonesia-markets-dollar-bonds-at-yields-above-existing-notes.html>.

Indonesia Interbank Call Rate, Jan 2017, [viewed 20 Jan 2017], <http://www.tradingeconomics.com/indonesia/interbank-rate>.

HDR, "JORC Resource Statement, ML Project", Prepared for GMR, May 2015

HDR, "JORC Reserve Statement, ML Project", Prepared for GMR, Oct 2013

HDR, "JORC Reserve Statement, BK Project", Prepared for GMR, June 2013

HDR, "JORC Reserve Statement, BL Project", Prepared for GMR, June 2013

VALMIN, 2015. Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code) Available from: https://www.ausimm.com.au/content/docs/valmin_2005.pdf [Accessed: 15 May 2014].

JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code – 2012 Edition [online], The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia. Available from: http://www.jorc.org/docs/jorc_code2012.pdf [Accessed: 15 May 2014].

Makes & Partners Law Firm, Report on Mining Rights for BSL Coal Concessions dated 2 February 2018.

Appendix A – CVs

Person	Role
Manish Garg (Director - Consulting)	
Qualification	B. Eng. (Hons), MAppFin
Prof. Membership	MAusIMM; MAICD
Contribution	Overall Supervision, Economic Assessment (VALMIN 2005)
Experience	Manish has more than 25 years' experience in mining Industry. Manish have worked for mining majors including Vedanta, Pasminco, WMC Resources, Oceanagold, BHP Billiton - Illawarra Coal and Rio Tinto Coal. Manish has been in consulting roles for past 10 years predominately focusing on feasibility studies, due diligence, valuations and M&A area. A trusted advisor, Manish has qualifications and wide experience in delivering due diligences, feasibility studies and project valuations for banks, financial investors and mining companies on global projects, some of these deals are valued at over US$5 billion.
Sonik Suri (Principal Consultant - Geology)	
Qualification	B. Sc. (Hons), M.Sc. (Geology)
Prof. Membership	MAusIMM
Contribution	Geology, Resource (JORC 2012)
Experience	Sonik has more than 25 years of experience in most aspects of geology including exploration, geological modelling, resource estimation and mine geology. He has worked for coal mining majors like Anglo American and consulting to major mining companies for both exploration management and geological modelling. As a consultant he has worked on audits and due diligence for companies within Australia and overseas. He has strong expertise in data management, QA/QC and interpretation; reviews/audits of geological data sets; resource models and resource estimates.
Dr Ross Halatchev (Principal Consultant - Mining)	
Qualification	B. Sc. (Mining), M.Sc., Ph.D. (Qld)
Prof. Membership	MAusIMM
Contribution	Mine Scheduling, Reserve (JORC 2012)
Experience	Ross is a mining engineer with 30 years' experience in the mining industry across operations and consulting. His career spans working in mining operations and as a mining consultant primarily in the mine planning & design role which included estimation of coal reserves, DFS/FS, due diligence studies, techno-commercial evaluations and technical inputs for mining contracts. Prior to joining Salva Mining, Ross was working as Principal Mining Engineer at Vale. To date Ross has worked on over 20 coal projects around the world, inclusive of coal projects in Australia, as well as in major coalfields in Indonesia, Mongolia and CIS.

Appendix B: SGX Mainboard Appendix 7.5

Cross-referenced from Rules 705(7), 1207(21) and Practice Note 6.3

Summary of Mineral Reserves and Resources

Name of Asset / Country: South Block of Barasentosa Lestari / Indonesia

Category	Mineral Type	Gross (100% Project)		Net Attributable to GEAR		Remarks
		Tonnes (millions)	Grade	Tonnes (millions)	Grade	
Reserves						
Proved	Coal	130.3	Subbituminous B	87.3	Subbituminous B	
Probable	Coal	64.4	Subbituminous B	43.1	Subbituminous B	
Total	Coal	194.6	Subbituminous B	130.4	Subbituminous B	
Resources*						
Measured	Coal	175	Subbituminous B	117	Subbituminous B	
Indicated	Coal	144	Subbituminous B	96	Subbituminous B	
Inferred	Coal	74	Subbituminous B	50	Subbituminous B	
Total	Coal	393	Subbituminous B	263	Subbituminous B	

** Mineral Resources are reported inclusive of the Mineral Reserves.*
GEAR ownership is 66.9998% of BSL.

Appendix C – Resource & Reserve Report

Please refer to the Independent Qualified Person's Report South Block Part 1 – Coal Resource & Reserve

SALVA
Mining Consultants

Golden Energy and Resources Ltd.

PT. Bara Sentosa Lestari Project ("BSL")

– North Block

Independent Qualified Person's Report

14 February 2018

SALVA
Mining Consultants

Golden Energy and Resources Ltd. ("GEAR")

PT. Bara Sentosa Lestari Project ("BSL") – North Block

Independent Qualified Person's Report - Valuation

Salva Mining Pty Ltd

300 Adelaide Street, Brisbane, QLD 4000, Australia
Email: inf@salvamining.com.au
Website: www.salvamining.com.au
Phone: +61 (0) 407 771 528

Effective Date: 31 December 2017

14 February 2018

Independent Qualified Person:

Manish Garg
BEng (Hons), Master of Applied Finance
MAusIMM, GAICD
Director, Salva Mining Pty Ltd

SALVA
Mining Consultants

Table of Contents

Executive Summary **9**

Outcrop Mapping 10

Drilling 10

1 Introduction **12**

1.1 Scope 12

1.2 Data Sources 12

1.3 Disclaimer and Warranty 12

1.4 Independent Competent Person and Expert Statement 14

1.4.1 Statement of Independence & Fees 14

2 Project Description **15**

2.1 Property Description and Access 15

2.2 Ownership and Concession 16

2.3 Tenure 17

3 Geology **18**

3.1 Regional Geology 18

3.2 Local Geology 19

4 Previous Exploration **21**

4.1 Exploration History 21

4.2 Outcrop Mapping 21

4.3 Drilling 24

5 Potential Coal Logistics **27**

6 Valuation **29**

6.1 Valuation Approaches 29

6.2 Valuation Approach for Assessing the BSL North Block concession 29

6.3 Comparative Market Transaction Method 30

6.4 Valuation using Geo-Scientific Rating Method 33

7 Valuation Summary **36**

7.1 Discussion on Salva Mining's Valuation Range 36

7.2 Previous Valuation 37

SALVA Mining Consultants

8 Risk Factors 38

8.1 Project Risks 38

8.1.1 Resources and Reserves 38

8.1.2 Coal Price Risk 38

8.1.3 Mine Infrastructure Associated Risk 38

8.1.4 Mining Approvals, Tenure and Permits 38

8.1.5 Land Acquisition 39

8.1.6 Environmental and Social Risks 39

8.1.7 Political and Regulatory Risk 39

References 40

Appendix A – CVs 41

Appendix B – Valuation Approaches 42

List of Figures

Figure 2:1 General Location Plan – BSL North Block 15

Figure 2:2 Tenement (Green) and Location of Individual Coal Blocks 16

Figure 3:1 Regional Geology - South Sumatra Basin 18

Figure 3:2 Local Geological Map 20

Figure 4:1 Drilling and Out Crop Mapping 23

Figure 5:1 Coal Transport by Road from BSL North Block to Gorby Port 28

Figure 7:1 Uncertainty by Exploration Stage 37

List of Tables

Table 2:1 BSL Concession Details 16

Table 4:1 Coal Outcrop – Location, Strike & Dip 21

Table 4:2 Drill Hole Location 24

Table 4:3 Coal Intercepted (Depth & Thickness) 24

Table 4:4 Drill Hole – Coal Quality 25

Table 5:1 Road Logistics 27

SALVA
Mining Consultants

Table 6:1 Typical Valuation Methods 29
Table 6:2 Comparative Market Transaction (Concession with No Coal Resources)31
Table 6:3 Market Based Valuation, BSL North Block 33
Table 6:4 Geo-Scientific Rating Criteria 34
Table 6:5 Geo-Scientific Method Valuation 35
Table 7:1 Valuation Summary 36
Table 7:2 General Guideline - Confidence for Target and Resource Estimates ... 36

SALVA
Mining Consultants

Key Abbreviations

^{0}	Degrees
$ or USD	United States Dollar
adb	Air dried basis, a basis on which coal quality is measured
AMSL	Above Mean Sea Level
AMDAL	Analisis Mengenai Dampak Lingkungan Hidup- Environmental Impact Assessment (EIA), which contains three sections, the ANDAL, the RKL and the RPL
ANDAL	Analisis Dampak Lingkungan Hidup, component of the AMDAL that reports the significant environmental impacts of the proposed mining activity
ar	As received basis
ASR	Average stripping ratio
AusIMM	Australasian Institute of Mining and Metallurgy
Batter	Slope of Advancing Mine Strip
bcm	bank cubic meter
BD	bulk density
CHPP	Coal Handling and Processing Plant
CV	Calorific value
Capex	Capital Expenditure
Coal Resource	A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
Coal Reserve	A 'Coal Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.
DCF	Discounted cash flow
DGMC	Directorate General of Minerals and Coal within the Ministry of Energy and Mineral Resources
FC	Fixed Carbon
gar	gross as received, a basis on which coal quality is measured
GCV	Gross Calorific Value, "The Gross Calorific Value of coal is the amount of heat produced by its complete combustion of its unit quantity." It is usually

	expressed in kcal/kg unit.
GEAR	Golden Energy and Resources Ltd.
ha	Hectare(s)
HGI	Hardgrove Grindability Index
IM	Inherent Moisture
IPPKH	'Izin Pinjam Pakai Kawasan Hutan' which translates to a borrow to use permit in a production forest
IRR	Internal Rate of Return
IUP or IUPOP	'Izin Usaha Pertambangan' which translates to 'Mining Business License'
JORC	2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, Australian Institute of Geoscientists and Mineral Council of Australia
K	thousand
kcal/kg	Unit of energy (kilocalorie) per kilogram
kg	kilogram
km	Kilometers(s)
km^2	Square kilometre(s)
kV kilovolt	kV kilovolt
M	Meter
lcm	loose cubic metre
LOM	Life of Mine
M	Million
Mbcm	Million bank cubic metres
Mbcmpa	Million bank cubic metres per annum
MEMR	Ministry of Energy and Mineral Resources within the central government
m RL	metres reduced level
m^3	cubic metre
Mt	Millions of tonnes
Mtpa	Millions of tonnes per annum
MW	Megawatt
NAR	Net as received
NPV	Net present value
NTA	Net tangible assets
Opex	Operating expenditure
PKP2B	'Perjanjian Kerjasama Pengusahaan Pertambangan Batubara' – same as CCoW
RD	Relative density
RKL	'Rencana Pengelolaan Lingkungan' - environmental management plan
ROM	Run of Mine
RKL	Relative Level - survey reference for height of landforms above a datum level
RPL	'Rencana Pemantauan Lingkungan' - environmental monitoring plan

Salva Mining	Salva Mining Pty Ltd.
SE	Specific Energy
SR	Strip ratio (of waste to ROM coal) expressed as bcm per tonne
t	Tonne
tkm	Tonne kilometre
tph	Tonnes per hour
tpa	Tonnes per annum
TM	Total Moisture (%)
TS	Total Sulphur (%)
VALMIN	2015 Edition of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports
VM	Volatile Matter (%)
WACC	Weighted Average Cost of Capital

SALVA
Mining Consultants

Executive Summary

Introduction

Golden Energy and Resources Ltd. ("GEAR" or "Client") has engaged Salva Mining Pty Ltd ("Salva Mining") to prepare an Independent Qualified Person's Report ("Report") including mineral asset valuation for the Northern Block of the Bara Sentosa Lestari Concession ("BSL North Block") located in South Sumatra, Indonesia.

The Qualified Person's Report is part of the work completed by GEAR as part of potential acquisition of these assets and is planned to be presented to the company's shareholders as part of continuous disclosure requirements of the company. The independent valuation has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code 2015).

The effective date of valuation is 31 December 2017.

BSL Project

The Barasentosa Lestari Project - North Block ("BSL North Block") is located in the Kabupaten Musi Rawas Utara and Kabupaten Musi Rawas Regencies, South Sumatra, Indonesia. The BSL Project area is located almost equidistant (200 - 250 km by road) from the major cities of Sumatra Island, namely Palembang and Bengkulu.

The BSL coal deposit is a part of the coal deposits held through Generation II Coal Contract of Work. These coal deposits were previously held by PT. Duta Sarana Internusa and PT Banpu Public Company Limited before being acquired by GMR Resources Ltd.

The BSL Project consists of two sub-blocks, namely north and south blocks, covering a total area of 23,300 Ha.

South Block: Mining to date has concentrated on the South Block (~ 7,695 Ha) where four sub-blocks prospective for coal (Figure 3:2) have been identified:- Muara Lakitan (ML); Batukucing (BK); Belani (BL); and Ampalau. South Block is an advanced project where resource and reserves have been delineated and mining operations have recently commenced. South Block is covered in a separate report.

North Block: In the North Block (~ 15,605 Ha), three sub-blocks prospective for coal have been identified:- Kapas River (KR); Merjang (MJ); and Meranti (MR).

Previous Exploration – North Block

There have been a number of phases of exploration completed in the BSL North Block coal concession area. The first phase involved geological mapping of the concession and outcrop mapping and sampling across 52 coal outcrop location. The second phase involved exploratory drilling incorporating 9 drill holes.

SALVA Mining Consultants

Outcrop Mapping

The main objective of the work was to map the concession for coal outcrop and assess occurrence of coal seams, its trike and dip. Coal seams outcrop were mapped at 52 locations. Shallow coal occurrence and outcrops were found in all three sub-blocks of Kapas River, Merjang and Meranti area. The average dip was around 8 degrees.

Drilling

The main objective of the drilling program was to confirm the occurrence of coal and determine the areas of potential Coal Resource. Open Hole and Touch Coring method was used during this program. A total of 9 drill holes were drilled across the concession.

Coal seams were intercepted from depth of 4m depth to 56 m. The average coal thickness across each of these drill holes was 8.4 meters. This suggests the occurrence of coal of reasonable thickness at shallow depth across the majority of the coal concession.

Coal quality samples were collected and analysed for total moisture, inherent moisture, ash, volatile matter, fixed carbon, sulphur, relative density and calorific value.

Logistics

It is proposed to transport coal from North Block by road to the Gorby Port which is located north east of the concession. The company has accessed the road haulage option for the BSL North Block to Gorby Port for loading to river barge for transshipment at high seas.

Coal will transport of ~80km from the North Block by road to the Gorby Port. There are local roads (government/village roads) available along with dedicated private haulage road from the pits to the Gorby Port which needs to be upgraded to carry proposed peak production capacity.

Coal from Gorby port will be further transported by the 7,500t barges to the offshore trans-shipment port for coal export for a distance of ~120 km.

Road Logistics

Section		Distance (km)	Road Track	Upgrade Reqd.
From	To			
North Pit Junction	PT Bumi Persada Road	18.9	Existing	No
PT Bumi Persada Road	Pulia Gading Village	55.0	Existing	No
Pulia Gading Village	Gorby Port	6.1	Existing	Yes
Distance (km)		**~80.0**		

Project Valuation and Range

Project does not have any defined Resource and Reserves and there is no definitive feasibility study relevant to the current circumstances. Therefore, the Information on the project economics is not at sufficiently advanced stage for determination of a meaningful NPV of the project based on Income based valuation method. Therefore, Salva Mining has assessed the value of the project on two approaches – Geoscientific and market based (Comparable Transactions) approaches.

Salva Mining has estimated the valuation of the BSL concession using the assumptions and inputs detailed in this report. Salva Mining's opinion of the technical value and thus the project value (on 100% basis) as at 31 December 2017 is shown in below, which takes into account the high and low cases and the sensitivity of the project.

Valuation Summary – BSL Project, 100% Basis

Valuation Method	Values (US $M)		
	Low	Preferred	High
Market Comparable	17.2	20.3	23.4
Geo-Scientific Rating	11.2	20.3	29.3
BSL – North Block Concession (100% value)	14.2	**20.3**	26.4

Previous Valuation

Salva Mining has previously valued the tenement as of 1 April 2017 at US $21.5M.

SALVA
Mining Consultants

1 Introduction

Golden Energy and Resources Ltd. ("GEAR" or "Client") has engaged Salva Mining Pty Ltd ("Salva Mining") to prepare an Independent Qualified Person's Report ("Report") including mineral asset valuation for the Northern Block of the Bara Sentosa Lestari Concession ("BSL North Block") located in South Sumatra, Indonesia.

The Qualified Person's Report is part of the work completed by GEAR as part of potential acquisition of these assets and is planned to be presented to the company's shareholders as part of continuous disclosure requirements of the company. The independent valuation has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code 2015).

1.1 Scope

GEAR has requested that Salva Mining prepare an Independent Qualified Person's Report ("Report") for the Northern Block of the Bara Sentosa Lestari Project ("BSL North Block") located in the Kabupaten Musi Rawas Utara and Kabupaten Musi Rawas Regencies in South Sumatra Province, Indonesia.

This report covers the mineral asset valuation for the BSL North Block coal concession only (i.e., it excludes South Block, which is covered in separate report) and not for the entire company which holds the assets.

1.2 Data Sources

This review is based on the information provided by GEAR, the technical reports of previous consultants and vendors, GMR Resources Ltd ("GMR"), as well as other published and unpublished data relevant to the project area.

Salva Mining has carried out its own independent assessment of the quality of the geological and mining data. Salva Mining relied on an Independent legal firm, Makes & Partners ("MPL"), a technical specialist that has carried out independent enquiry regarding the status of agreements, royalties or concession standing pertaining to the assets.

In developing our assumptions for this Statement, Salva Mining has relied upon information provided by the company and information available in the public domain. Key sources are outlined in this Report and all data included in the preparation of this Report has been detailed in the references section of this report. Salva Mining has accepted all information supplied to it in good faith.

Mr. Manish Garg, Director – Advisory / Partner conducted the site visit and to GEAR offices in Jakarta from 28 August 2017 to 1 September 2017 to review technical studies and commercial information.

1.3 Disclaimer and Warranty

This Report was commissioned by GEAR on a fee-for-service basis according to Salva Mining's schedule of rates. Salva Mining's fee is not contingent on the outcome of its valuation or the success or failure for the transaction for which the report was prepared. None of Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates have (or

had) a pecuniary or beneficial interest in/or association with any of the Golden Energy and Resources Ltd., or their directors, substantial shareholders, subsidiaries, associated companies, advisors and their associates prior to or during the preparation of this report.

Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates are independent of Golden Energy and Resources Ltd., its directors, substantial shareholders, advisers and their associates.

A draft version of this report was provided to the directors of Golden Energy and Resources Ltd. for comment in respect of omissions and factual accuracy. As recommended in Section 39 of the VALMIN Code, Golden Energy and Resources Ltd. has provided Salva Mining with an indemnity under which Salva Mining is to be compensated for any liability and/or any additional work or expenditure, which:

- Results from Salva Mining's reliance on information provided by Golden Energy and Resources Ltd. and/or their Independent consultants that is materially inaccurate or incomplete, or
- Relates to any consequential extension of workload through queries, questions or public hearings arising from this report.

This report may contain or refer to forward-looking information based on current expectations, including, but not limited to timing of mineral Resource estimates, future exploration or project development programs and the impact of these events on the company.

Forward-looking information is subject to significant risks and uncertainties, as actual results may differ materially from forecasted results. Forward-looking information is provided as of the date hereof and Salva Mining assumes no responsibility to update or revise them to reflect new events or circumstances.

The conclusions expressed in this report are as on the 31 December 2017. The valuation is only appropriate for this date and may change in time in response to variations in economic, market, legal or political factors, in addition to ongoing exploration results. All monetary values outlined in this report are expressed in US dollars ($) unless otherwise stated. Salva Mining services exclude any commentary on the fairness or reasonableness of any consideration in relation to these assets.

1.4 Independent Competent Person and Expert Statement

The independent valuation has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code 2015). This Mineral asset techno-commercial assessment and valuation in this report was prepared by, or under the supervision of Manish Garg (B.Eng. (Minerals Engineering), MAppFinance, MAusIMM).

Mr. Garg, Director – Consulting / Partner and a full-time employee of Salva Mining has sufficient assessment and valuation experience, which is relevant to the activity he is undertaking to qualify as an Expert as defined in the 2015 Edition of the "Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports" (VALMIN Code 2015).

This report was prepared on behalf of Salva Mining by the signatory to this report, assisted by the subject specialists' competent persons whose qualifications and experience are set out in Appendix A of this report.

Mr. Manish Garg
Director – Consulting / Partner
Salva Mining Pty Ltd.

1.4.1 Statement of Independence & Fees

This Report was commissioned by Golden Energy and Resources Ltd. on a fee-for-service basis according to Salva Mining's schedule of rates which varies from USD 100/hr to USD 300/hr depending on the Consultant's skills and experience. Salva Mining's fee is not contingent on the outcome of its valuation or the success or failure for the transaction for which the report was prepared. The above mentioned person(s) have no interest whatsoever in the mining assets reviewed and will gain no reward for the provision of this techno-commercial assessment.

Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates are independent of Golden Energy and Resources Ltd., its directors, substantial shareholders, advisers and their associates.

None of Salva Mining's partners (including Mr. Garg), directors, substantial shareholders and their associates have (or had) a pecuniary or beneficial interest in/or association with Golden Energy and Resources Ltd., or their directors, substantial shareholders, subsidiaries, associated companies, advisors and their associates prior to or during the preparation of this report.

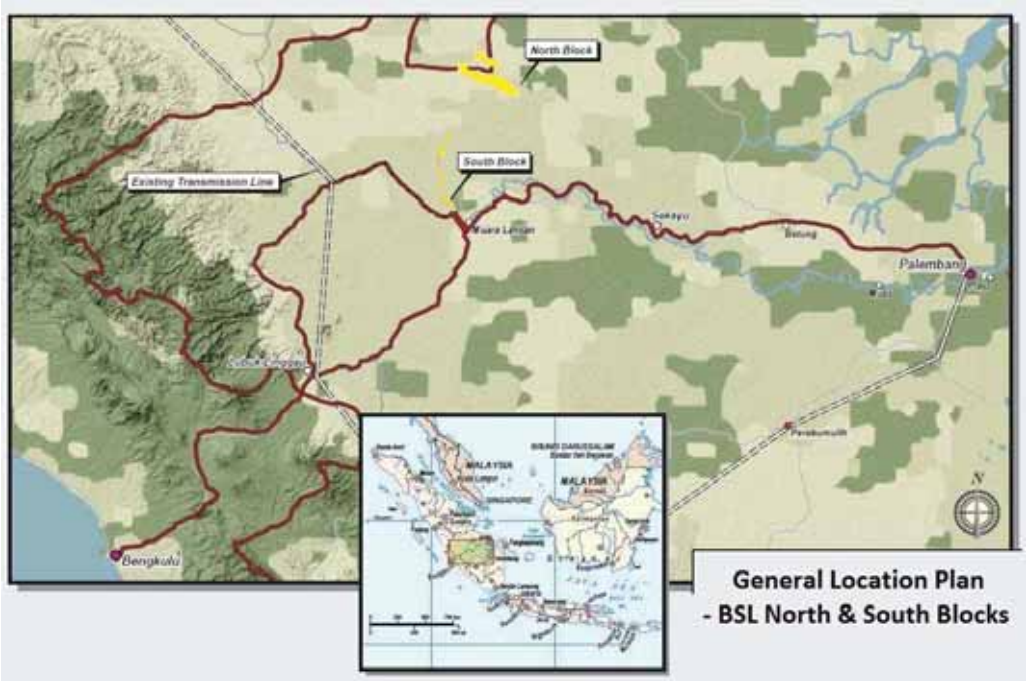
SALVA
Mining Consultants

2 Project Description

2.1 Property Description and Access

The Bara Sentosa Lestari Project ("BSL Project") is located in the Kabupaten Musi Rawas Utara and Kabupaten Musi Rawas Regencies, South Sumatra, Indonesia (Figure 3:1). The project is subdivided into two distinct blocks – BSL North Block and BSL South Block. This report covers the BSL North Block only. The BSL North Block is located almost equidistant (200 - 250 km by road) from the major cities of Sumatra Island, namely Palembang and Bengkulu.

Figure 2:1 General Location Plan – BSL North Block



The BSL coal deposit is a part of the coal deposits held through Generation II Coal Contract of Work (PKP2P: 015/PK/PTBA-BL/1994). These coal deposits were previously held by PT. Duta Sarana Internusa and PT Banpu Public Company Limited before being acquired by PT Barasentosa Lestari (PT BSL).

The BSL Project consists of two sub-blocks, namely north and south blocks, covering a total area of 23,300 Ha.

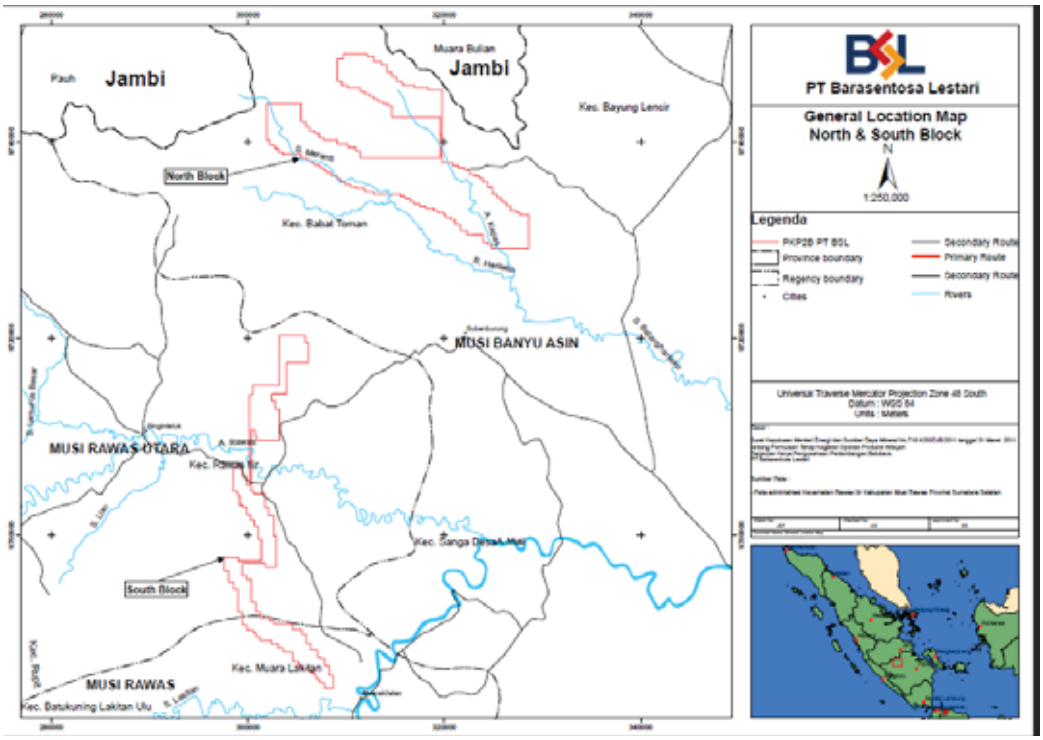
South Block: Mining to date has concentrated on the South Block (~ 7,695 Ha) where four sub-blocks prospective for coal (Figure 3:2) have been identified:- Muara Lakitan (ML); Batukucing (BK); Belani (BL); and Ampalau.

North Block: In the North Block (~ 15,605 Ha), three sub-blocks prospective for coal (Figure 3:2) have been identified: - Kapas River (KR); Merjang (MJ); and Meranti (MR).

.

SALVA Mining Consultants

Figure 2:2 Tenement (Green) and Location of Individual Coal Blocks



This Report only deals with the mineral asset valuation for the BSL North Block only. South Block is covered in a separate report.

2.2 Ownership and Concession

PT Barasentosa Lestari is the holder of a mining concession pursuant to the Coal Contract of Work dated 15 August 1994 entered into between the Company and PT Perusahaan Negara Tambang Batubara (as amended on 27 June 1999 and 14 November 2017) (the "CCoW"). The detail of the coal concession is given in Table 2:1.

Table 2:1 BSL Concession Details

Concession Number	Concession Type	Area (ha)	Status	Granted	Validity
015/PK/PTBA-BL/1994	Perjanjian Kerjasama Pengusahaan Pertambangan Batubara (CCoW)	23,300 ha	Granted	15-Aug-1994 Amended on 27 June 1997 & 14 November 2017	30 years

2.3 Tenure

Clause 67 of the VALMIN Code states that status of tenement is Material and requires disclosure. Determination of the status of Tenements is necessary and must be based on a recent independent inquiry, either by the Expert or a Specialist.

Makes & Partners Law Firm ("MPL"), a Jakarta based legal firm, was commissioned to prepare a report in respect of the legal aspects of the mining activities within the BSL concession, solely from the perspective of Indonesian laws. MPL's scope was to confirm that:

- PT Barasentosa Lestari (the "Company"), a limited liability company duly established and existing under the laws of the Republic of Indonesia is the holder of a mining concession pursuant to the Coal Contract of Work dated 15 August 1994 entered into between the Company and PT Perusahaan Negara Tambang Batubara (as amended on 27 June 1997 and 14 November 2017) (the "CCoW").
- The CCoW of the Company is valid for 30 (thirty) years commencing as of the Commencement Date. Based on Article 10.2 of the CCoW Commencement Date is defined as "The earliest of, the first date of the month after the first month the average daily coal production reaches 70% of the planned production capacity, but no later than 6 month after the completion of the construction activities, or 10 years and 6 months after the date of the CCoW'; and
- to the best of MPL's knowledge, the tenement is in good standing and the Company has complied with the terms and conditions of the CCoW, except for those which are not likely to have a material adverse effect on the CCoW of the Company.

MPL issued its final report on 2 February 2018. Based on the report by MPL, Salva Mining considers the tenement tenure and permits to be in good standing.

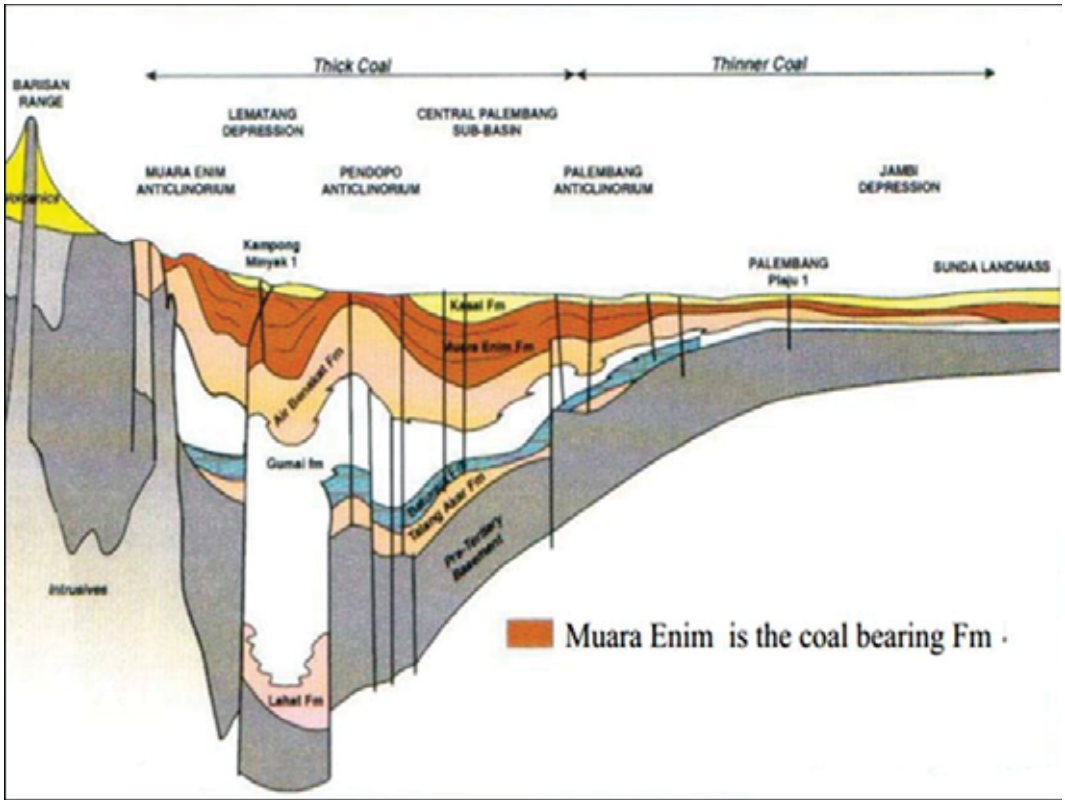
SALVA
Mining Consultants

3 Geology

3.1 Regional Geology

The late Miocene to Pliocene Muara Enim Formation ("Muara Enim Fm") is the main coal bearing formation present in the South Sumatra basin (Figure 3:1). The thickness of this formation, in the area around Muara Enim and Lahat, is around 500-700m.The thickness of individual coal seams varies with the thickness of the formation, typically varying between 10 m to 30 m in thickness, with shallow marine clays at the base, and shoreline and delta plain facies (sand, clay, coal) at the top. The coal present in most of the basin is of low rank. However, close to diorite intrusions, like in the case of the mines of PTBA, these low rank coals have been transferred into high rank coals. The Muara Enim Fm has been divided into 4 sub formations (M-1 to M-4) and contains 12 different coal seams of maximum thickness up to 30 - 35 metres. The soft nature of the coal and overburden eliminates the requirement of blasting in many places.

Figure 3:1 Regional Geology - South Sumatra Basin



Source: Koesoemadinata, 1978

SALVA
Mining Consultants

3.2 Local Geology

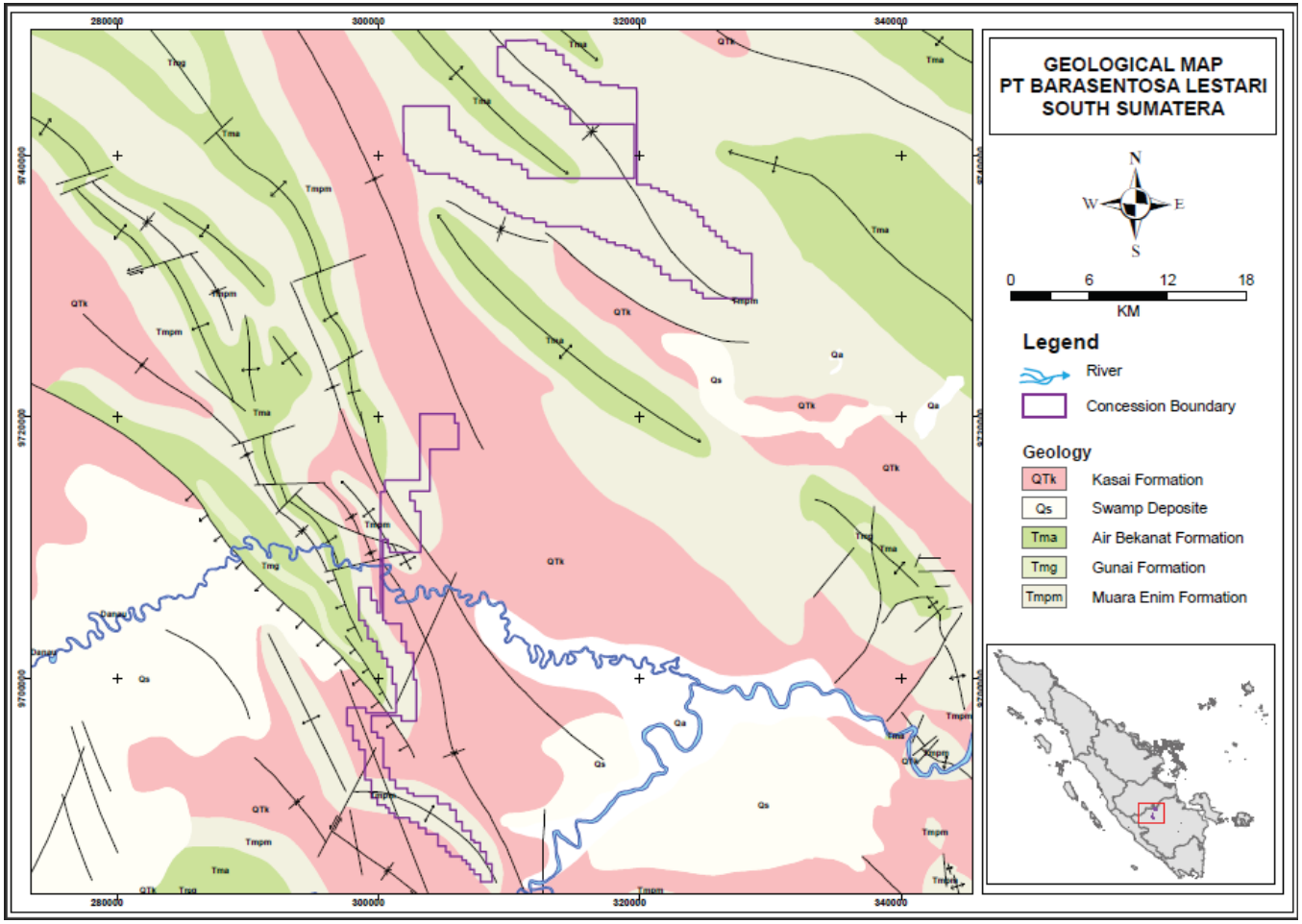
The local geology of the concession is comprised mainly of the late Miocene to Pliocene age Muara Enim Formation which is conformably overlain by the Kasai Formation to the south (Figure 3:2). Quaternary age, swamp derived, alluvial sediments overlie the Miocene/Pliocene age sediments in the north of the concession.

The Muara Enim Formation is the major coal bearing formation within the South Sumatra region. The top and bottom of the Muara Enim Formation are defined by the upper and lower occurrence of laterally continuous coal beds. The formation itself is comprised of several stacked parasequences which vary from 0 m to 30 m in thickness, with shallow marine or bay clays at the base and shoreline and delta plain facies (sand, clay, coal) at the top. The Muara Enim Formation has been divided into 4 sub-formations (M-1 to M-4) and contains up to12 different coal seams, which can reach a maximum total thickness of around 30- 35 metres.

The Kasai Formation is often marked by a distinct pumice or lapilli horizon containing rounded pumice fragments of about 1 cm in diameter. This formation is generally dominated by light coloured, poorly bedded tuffaceous sands and gravels. Often the Kasai formation also contains thin coal seams.

No major faulting is known to occur within the concession but small scale (1-2m) faulting is possible given that it is unlikely that mapping and drilling to date will have been able to identify such small scale structure.

Figure 3:2 Local Geological Map



SALVA
Mining Consultants

4 Previous Exploration

4.1 Exploration History

There have been a number of phases of exploration completed in the BSL North Block coal concession area. The first phase involved geological mapping of the concession and outcrop mapping and sampling across 52 coal outcrop location. The second phase involved exploratory drilling incorporating 9 drill holes.

4.2 Outcrop Mapping

The main objective of the work was to map the concession for coal outcrop and assess occurrence of coal seams, its trike and dip. Coal seams outcrop were mapped at 52 locations (Table 4:1 and Figure 4:1).

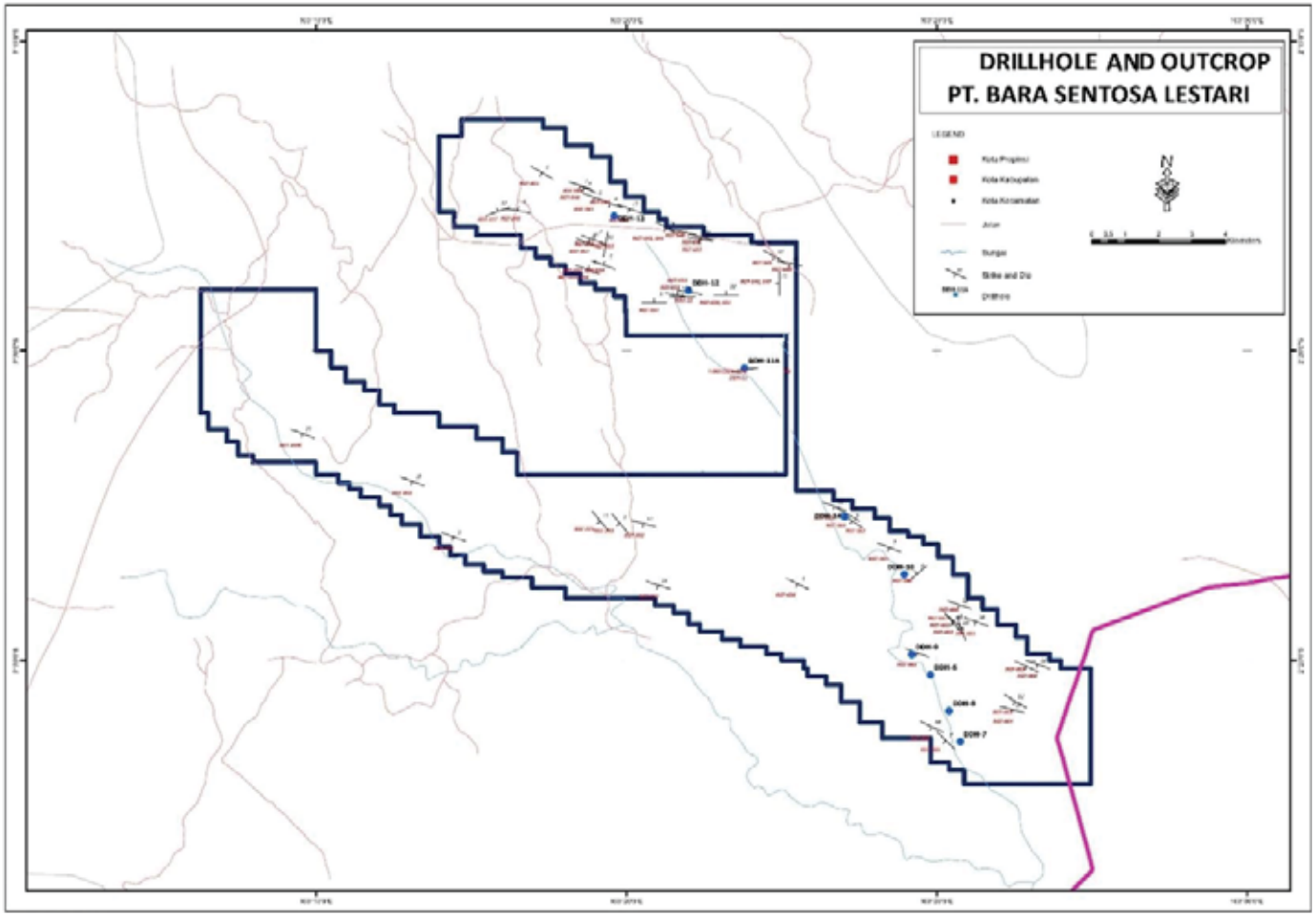
Table 4:1 Coal Outcrop – Location, Strike & Dip

No.	Locality	Location	Latitude	Longitude	Strike	Dip	Thick (M)
1	RGT-044	Kapas R tributary	2º17'38.8"	103º19'43.5"	N110E	8	20.4
2	RGT-046	Kapas R tributary	2º17'44.0"	103º20'1.9"	N110E	12	19.8
3	RGT-049 (DDH-11A)	Kapas R	2º20'16.2"	103º21'54.5"	N260E	20	>2.0
4	RGT-052	Kapas R tributary	2º19'3.8	103º20'49.4"	N280E	12	12.3
5	RGT-053	Kapas R tributary	2º19'5.5"	103º20'54.3"	N270E	9	6.3
6	RGT-057	Kapas R tributary	2º19'10.9"	103º20'26.9"	N270E	9	12.3
7	RGT-841	Kapas R tributary	2º17'33.1"	103º19'28.2"	N110E	6	16.5
8	RGT-844	Kapas R tributary	2º17'23.4"	103º19'18.3"	N115E	6	27.5
9	RGT-846	Kapas R tributary	2º17'21.6"	103º19'14.5"	N110E	7	18.5
10	RGT-849	Perekat R tributary	2º17'42.2"	103º18'15.3"	N280E	5	26
11	RGT-851	Perekat R tributary	2º17'08.8"	103º18'37.1"	N120E	6	12
12	RGT-853	Kapas R tributary	2º18'16.4"	103º19'37.9"	N190E	10	4.5
13	RGT-855	Kapas R tributary	2º18'10.6"	103º19'28.6"	N290E	7	1.8
14	RGT-857	Kapas R tributary	2º18'13.6"	103º19'23.5"	N290E	25	4.5
15	RGT-859	Rengas Pantai R	2º25'07.9"	103º26'25.9"	N115E	15	4.4
16	RGT-860	Rengas Pantai R	2º25'05.9"	103º26'36.7"	N110E	12	2.1
17	RGT-863	Rengas Pantai R	2º25'41.1"	103º26'14.7"	N120E	12	7

SALVA
Mining Consultants

No.	Locality	Location	Latitude	Longitude	Strike	Dip	Thick (M)
18	RGT-864	Rengas Pantai R	2°25'49.1"	103°26'12.3"	N105E	10	1.4 & 2 & 2.3
19	RGT-865	Marajaha R	2°26'18.7"	103°25'7.3"	N135E	7	1.4
20	RGT-866	Marajaha R	2°26'5.8"	103°24'54.3"	N115E	10	4.4
21	RGT-640	Kayu Ara R	2°18'6.5"	103°20'54.5"	N100E	14	2
22	RGT-641	Kayu Ara R	2°18'13.7"	103°21'10.3"	N100E	12	3.5
23	RGT-642	Kayu Ara R	2°18'11.6"	103°21'11.6"	N105E	14	6.5
24	RGT-643, 644	Kayu Ara R	2°18'2.2"	103°20'37.3"	N120E	14	17
25	RGT-645	Aur R	2°18'30"	103°22'22.3"	N120E	35	15
26	RGT-646, 647	Aur River	2°18'53.5"	103°22'25.7"	N180E	10	10
27	RGT-648	Aur River	2°18'36.6"	103°22'37.3"	N100E	44	8
28	RGT-650, 651	Aur R tributary	2°19'3.3"	103°21'36.2"	N270E	10	9.4
29	RGT-652, 653/654	Kapas R tributary	2°18'34.5"	103°19'38.5"	N290E	5	17.4
30	RGT-655, 656	Kapas R tributary	2°18'38.8"	103°19'23.2"	N290E	6	6
31	RGT-658	Kapas R tributary	2°23'47.5"	103°22'44.4"	N116E	4	2.3
32	RGT-661	Tajakgajah R	2°24'25.3"	103°25'14.8"	N140E	15	7
33	RGT-662	Tajakgajah R	2°24'23.6"	103°25'15.4"	N130E	10	3.4
34	RGT-663	Durian R	2°24'29.5"	103°25'21.6"	N160E	10	7.2
35	RGT-665	Durian R	2°24'24.5"	103°25'37.1"	N110E	10	2.5
36	RGT-666	Durian R tributary	2°24'8.0"	103°25'21.0"	N110E	12	8.5
37	DDH-12	Kapas R	2°19'00.9"	103°21'01.7"	N280E	7	>2
38	DDH-11	Kapas R	2°20'16.2"	103°21'54.5"	N260E	15	>2
39	RGT-060	Kapas R	2°23'34.9"	103°24'39.5"	N230E	8	3.4
40	RGT-061	Kapas R	2°23'12.3"	103°24'12.8"	N110E	7	6
41	RGT-062	Kapas R	2°22'46.1"	103°23'36.9"	N125E	5	2.2
42	RGT-063	Kapas R	2°22'40.3"	103°23'33.6"	N120E	15	6.8
43	RGT-064	Kapas R	2°22'32.3"	103°23'20.3"	N110E	10	2.9
44	RGT-065	Kapas R	2°24'54.6"	103°24'40.3"	N110E	5	5
45	RGT-443	Cangkring R	2°22'49"	103°20'16"	N105E	12	1.2
46	RGT-457	Meranti R	2°23'2"	103°17'12"	N110E	9	1.5
47	RGT-458	Meranti R	2°22'8"	103°16'32"	N110E	10	3.3
48	RGT-459C	Meranti R tributary	2°21'22"	103°14'46"	N110E	23	1.3 & 2.0
49	RGT-222	Cangkring R tributary	2°23'49"	103°20'30"	N107E	15	3
50	RGT-224	Tanjung Kalup R	2°22'48"	103°19'52"	N140E	8	11.5
51	RGT-225	Tanjung Kalup R	2°22'46"	103°19'33"	N140E	10	5.9
52	RGT-227	Merjang R	2°17'43"	103°17'55"	N250E	12	21

Figure 4:1 Drilling and Out Crop Mapping



As shown in Figure 4:1, shallow coal occurrence and outcrop was found in all three sub-blocks of Kapas River, Merjang and Meranti area. The average dip was around 8 degrees.

4.3 Drilling

The main objective of the drilling program was to confirm the occurrence of coal and determine the areas of potential Coal Resource. Open Hole and Touch Coring method was used during this program.

A total of 9 drill holes were drilled across the concession. Location of the drill holes is shown in Table 4:2 and Figure 4:1.

Table 4:2 Drill Hole Locations

No	Borehole	Longitude (East)			Latitude (South)			Easting (X)	Northing (Y)
		Ø	'	"	Ø	'	"	m	m
1	DDH-6	103	24	54.9	2	25	14.3	323,763.0	9,732,342.0
2	DDH-7	103	25	22.4	2	26	18.5	324,655.0	9,730,371.5
3	DDH-8	103	25	11.7	2	25	48.7	324,320.3	9,731,286.6
4	DDH-9	103	24	34.9	2	24	54.4	323,206.1	9,732,952.8
5	DDH-10	103	24	28.6	2	23	36.7	322,980.9	9,735,338.7
6	DDH-11A	103	21	54.5	2	20	16.2	318,191.1	9,741,492.3
7	DDH-12	103	21	1.7	2	19	0.9	316,520.0	9,743,802.5
8	DDH-13	103	19	48.9	2	17	49.3	314,292.7	9,745,999.3
9	DDH-14	103	23	32.7	2	22	40.7	321,199.4	9,737,057.2

The coal intercepted (depth and thickness) in major coals seams are shown in Table 4:3.

Table 4:3 Coal Intercepted (Depth & Thickness)

No.	Drillhole ID	Total depth (m)	Coal Seam Thickness (m)	Depth (m)	Area	Elevation a.s.l. (m)
1	DDH-6	57	1.15	10.45-11.6	Mouth Durian River	33
			1.8	14.3-16.1		
			5.55	38.75-44.3		
2	DDH-7	80	0.85	14.1-14.95	Downstream mouth Marajaha River	31
			1.45	46.1-47.55		
3	DDH-8	80	0.6	14.1-14.7	Downstream Kapas River	32
			1.15	55.56-56.71		
4	DDH-9	80	5.3	7.0-12.3	Lubuk Kangkung area	34
5	DDH-10	80	6.5	4.0-10.5	Tepian Sapi area	35
6	DDH-11A	80	11	10.5-21.5	Downstream mouth Landai River	37
			1	29.5-30.5		
7	DDH-12	80	9	5.0-14.0	Aur River	38
			0.6	21.0-21.6		

SALVA Mining Consultants

No.	Drillhole ID	Total depth (m)	Coal Seam Thickness (m)	Depth (m)	Area	Elevation a.s.l. (m)
8	DDH-13	80	22	9.0-31.0	Kapas Tengah village	40
			0.45	40.30-40.75		
			0.45	42.30-42.75		
9	DDH-14	80	6	6.0-12.0	Rengas Terduduk area	36
			1	18.0-19.0		

As seen for the table above, coal seams were intercepted from depth of 4m depth to 56 m. The average coal thickness across each of these drill holes was 8.4 meters. This suggests the **occurrence of coal of reasonable thickness at shallow depth across the majority of the coal concession.**

Coal quality samples were collected and analysed for total moisture, inherent moisture, ash, volatile matter, fixed carbon, sulphur, relative density and calorific value (Table 4:4).

Table 4:4 Drill Hole – Coal Quality

Drill Hole	Sample #	Total Moisture %ar	Inherent Moisture %adb	Ash Content %adb	Volatile Matter %adb	Fixed Carbon % adb	Total Sulphur % adb	Calorific Value Cal/g adb	Rel. Density
DDH-9	DDH-9 - 1/1+2+4	51.79	27.12	5.34	35.50	32.04	0.17	4,498	1.33
DDH-10	DDH-10 - 1/1	43.40	28.78	4.94	33.28	33.00	0.16	4,577	1.31
DDH-10	DDH-10 - 1/2	44.04	21.58	2.04	39.05	37.33	0.16	5,314	1.32
DDH-10	DDH-10 - 1/3	44.79	26.80	2.38	36.25	34.57	0.18	4,971	1.29
DDH-10	DDH-10 - 1/4	43.34	19.00	6.18	37.39	37.43	0.46	5,276	1.36
DDH-14	DDH-14 - 1/1	44.09	30.31	2.30	34.78	32.78	0.14	4,681	1.28
DDH-14	DDH-14 - 1/2	45.11	32.38	0.62	34.81	32.19	0.12	4,675	1.25
DDH-14	DDH-14 - 1/3	43.87	30.41	1.44	35.52	32.63	0.19	4,697	1.26
DDH-14	DDH-14 - 1/11	38.08	22.73	26.22	26.21	24.84	0.39	3,383	1.49
Kapas River		44.28	26.57	5.72	34.75	32.98	0.22	4,675	1.32
DDH-12	DDH-12 - 1/1	45.42	24.52	3.30	32.28	39.90	0.14	4,910	1.32
DDH-12	DDH-12 - 1/2	45.02	26.80	2.24	36.49	34.47	0.11	4,826	1.30
DDH-12	DDH-12 - 1/3-4 Comp	45.27	31.20	2.43	33.91	32.46	0.13	4,591	1.27
DDH-12	DDH-12 - 2/6	44.59	24.77	8.10	33.99	33.14	0.38	4,590	1.34
DDH-13	DDH-13/1	42.23	24.47	6.70	36.20	32.67	0.29	4,653	1.33
DDH-13	DDH-13/2	45.70	29.67	2.91	33.83	33.59	0.18	4,455	1.29
DDH-13	DDH-13/1+13/2 comp	44.69	27.65	4.49	35.54	33.32	0.22	4,352	
DDH-13	DDH-13/3	44.78	27.27	2.35	36.37	34.01	0.14	4,807	1.30
DDH-13	DDH-13/4	44.62	29.21	2.24	35.07	33.48	0.11	4,640	1.29
DDH-13	DDH-13/5	44.52	23.97	2.34	37.81	34.78	0.13	4,922	1.30

SALVA
Mining Consultants

Drill Hole	Sample #	Total Moisture %ar	Inherent Moisture %adb	Ash Content %adb	Volatile Matter %adb	Fixed Carbon % adb	Total Sulphur % adb	Calorific Value Cal/g adb	Rel. Density
DDH-13	DDH-13/6	46.07	24.45	2.56	37.85	35.14	0.12	4,928	1.30
DDH-13	DDH-13/5 + 13/6 Comp	45.43	24.04	2.60	37.51	34.57	0.12	4,593	
DDH-13	DDH-13/7	45.83	27.68	2.49	35.57	34.26	0.12	4,742	1.31
DDH-13	DDH-13/8	45.49	23.96	2.34	38.16	35.54	0.12	4,994	1.31
DDH-13	DDH-13/9	44.66	24.25	3.47	37.43	34.85	0.12	4,931	1.30
DDH-13	DDH-13/8 + 13/9 Comp	45.06	24.40	2.90	37.44	33.76	0.12	4,938	
DDH-13	DDH-13/7	45.20	23.63	4.64	36.31	34.92	0.11	4,911	1.32
DDH-13	DDH-13/11	45.73	27.26	2.16	35.82	34.76	0.15	4,867	1.29
Merjang Syncline		45.02	26.07	3.35	35.98	34.42	0.16	4,758	1.30
DDH-6	DDH-6 - 3/1+2+4	50.77	29.54	4.05	34.55	31.86	0.18	4,444	1.30
DDH-11A	DDH-11A - 1/1 Comp	43.27	22.81	2.31	39.04	35.84	0.18	5,228	1.31
DDH-11A	DDH-11A - 1/2 Comp	43.46	24.47	3.62	37.28	34.62	0.14	5,010	1.31
DDH-11A	DDH-11A - 1/4	45.69	19.97	2.22	38.61	39.20	0.19	5,453	1.32
DDH-11A	DDH-11A - 2/5	46.22	19.68	3.81	37.33	39.18	0.41	5,320	1.34
Meranti		44.66	21.73	2.99	38.07	37.21	0.23	5,253	1.32

Results of coal analysis suggest that the coal occurring in the concession is **low Sulphur, moderate calorific value sub-bituminous coal typical of Sumatra region.**

SALVA
Mining Consultants

5 Potential Coal Logistics

The company has accessed the road haulage option for the BSL North Block to Gorby Port for loading to river barge for transshipment at high seas.

It is proposed to transport coal from North Block by road to the Gorby Port which is located north east of the concession.

Coal will transported ~80km from the North Block by road to the Gorby Port. Table 5:1 exhibits the various road sections and the distances. There are local roads (government/village roads) available along with dedicated private haulage road from the pits to the Gorby Port which needs to be upgraded to carry proposed peak production capacity.

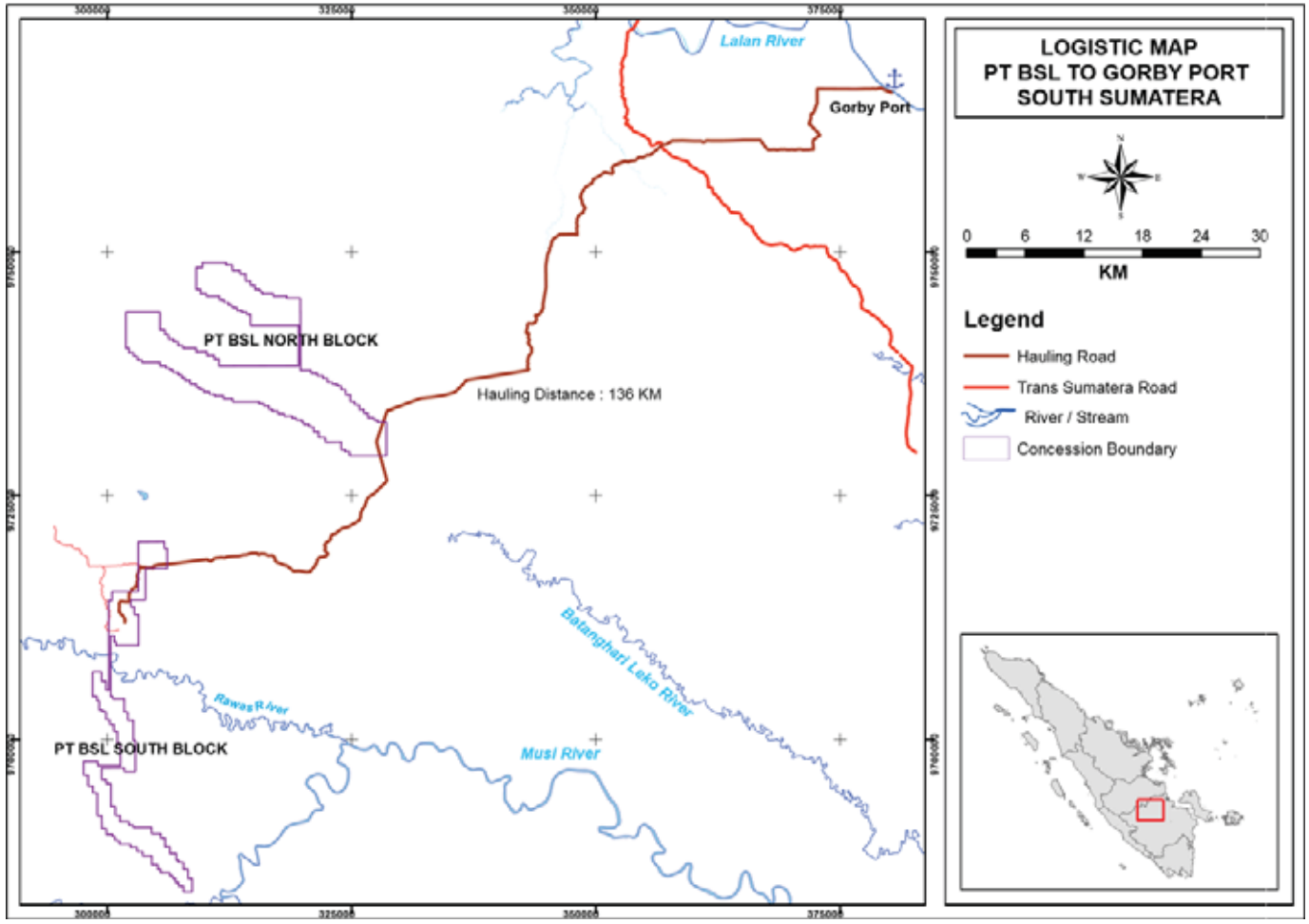
Coal from Gorby port will be further transported by the 7,500t barges to the offshore trans-shipment port for coal export for a distance of ~120 km.

Table 5:1 Road Logistics

Section		Distance (km)	Road Track	Upgrade Reqd.
From	To			
North Pit Junction	PT Bumi Persada Road	18.9	Existing	No
PT Bumi Persada Road	Pulia Gading Village	55.0	Existing	No
Pulia Gading Village	Gorby Port	6.1	Existing	Yes
Distance (km)		**~80.0**		

The existing and proposed road network to the Gorby Port from BSL North Block is presented in Figure 5:1.

Figure 5:1 Coal Transport by Road from BSL North Block to Gorby Port



6 Valuation

6.1 Valuation Approaches

There are a number of methods used in valuing mineral assets. The applicability of these methods depends on project specific factors including the level of maturity of the mineral assets.

In determining the appropriate method(s) to be used for valuation of these assets, Salva Mining has taken into consideration the classification of these assets as defined in the VALMIN Code and the different methodologies that are generally accepted as industry practice for each classification. Generally, there are three broad methods of valuation that are used for valuing mineral assets. These are the cost approach, income approach and market approach. The asset classifications that may be applied to a project are set out in Table 6:1 below.

Table 6:1 Typical Valuation Methods

Classification	General Description	Key Valuation Methods
Exploration Areas	Properties where mineralisation may or may not have been identified, but a Resource has not been identified.	Rule of Thumb, Geo-scientific method, Comparable Transactions.
Advanced Exploration Areas	Properties where considerable exploration has been undertaken and specific targets identified. Resource estimation may or may not have been made. Good understanding of mineralisation present.	Geo-scientific method, Appraised Value Method, Comparable Transactions.
Pre- development Projects	Properties where mineral Reserve has been identified but decision to proceed with development have not been made.	The above methods and DCF/NPV valuation.
Operating Mines	Properties where mining activities are already commenced.	DCF/NPV valuation.

6.2 Valuation Approach for Assessing the BSL North Block concession

In Salva Mining's opinion, the Project is an advanced exploration project where some drilling has been completed but no Coal Resources and Reserves has been delineated.

Project does not have any defend Reserves and there is no definitive feasibility study relevant to the current circumstances. Therefore, the Information on the project economics is not at sufficiently advanced stage for determination of a meaningful NPV of the project based on Income based valuation method. Therefore, Salva Mining has preferred to apply a combination of two methods to value the project due to the uncertainties attached to its progress.

Salva Mining has used two different valuation methods - Comparable market Transactions and Geoscientific Rating Method to form its opinion on the mineral asset valuation of the BSL North Block.

SALVA
Mining Consultants

6.3 Comparative Market Transaction Method

Identification of coal market transactions is difficult as public announcement in Indonesia have insufficient information regarding deal size, equity percentage and area of the concession. However, Salva Mining has identified 6 (six) market transactions in Indonesia which involved coal concessions with no defined coal resource or reserve (Table 6:2).

Out of these 8 transactions, 5 involved coal concessions in Kalimantan, 2 in Sumatra and 1 in Sulawesi province.

Table 6:2 Comparative Market Transactions (Concession with No Coal Resources)

Date	Project	Buyer	Seller	Location	Interest %	100% Valuation of Asset (US $M)	Rank	Area (ha)	Implied Value (US$/ha)
Oct-16	BPCI Coal Mine (closed Mine)	Zamia Metals Limited	Kirkham International Pte Ltd	Central Kalimantan	95.00%	$25.60	Coking and High Rank	4,798	$5,331
May-16	PT Silingkop Nusa Raya and PT Kentungau Raya	Jinantra Karya Raya	Cokal Limited	West Kalimantan	75.20%	0.2	Coking and High Rank	17,000	13
Apr-16	PT Cahaya Lembusuana	Geo Energy	Blessing Capital Pte Ltd	East Kalimantan	99.46%	$13.1	Low Rank	2,310	$5,658
Jun-14	Tuggal Putra Nusantara	Cokal	PT Tuggal Putra Nusantara	West Sumatra	70.00%	0.2	Anthracite Mine	100	1,500
May-13	Borneo Emas Hitam	Kilara Resources	PT Borneo Emas Hitam	East Kalimantan	80.00%	2.8	High Rank	1,002	2,745
Jan-13	Tambang Sekarsa Adadaya	PHI Group	PT Tambang Sekarsa Adadaya	West Sulawesi	70.00%	15	High Rank	9,690	1,548
Jan-13	Batubara Energi Prima and Berlian Mahkota	Indus Coal	PT Batubara Energi Prima and PT Berlian Mahkota	Jambi, Sumatra	38.00%	17.1	Low Rank	14,394	1,188
Sep-12	Karya Usaha Pertiwi	PT Harum Energy	PT Karya Wijaya Aneka Minerals	East Kalimantan	50.50%	4	Medium Rank	2,662	2,973
Average ($/ha)									**2,620**

As indicated in table 6:2, the implied value of land is varied widely from $13/ha to $3,000/ha, with the average of 2,620/ha.

With respect to BSL North Block, the analysis of each transaction is presented below.

BPCL coal mine is located in Central Kalimantan Region and had commenced production in 2015. It is located 32 kilometres from the Barito River, where the coal can be sold domestically or transported by barge to the transhipment port at Taboneo in South Kalimantan. The mine comprised on two pits with stripping ratio of up to 20:1. The mine was producing 0.5 Mtpa of semi hard coking coal before it ceased its operation in early 2016 because of adverse market condition. A Non JORC coal Reserve of 0.8M has been delineated in the concession which has not been upgraded. Compared to BSL North Block, BPCL coal mine is a superior project and should be valued at higher rate.

Cokal sold the PT Silingkop Nusa Raya and PT Kentungau Raya project in West Kalimantan to Jinantra Karya Raya in May 2016. In Salva Mining's opinion, implied value derived from this transaction of $13/ha may not represent a true fair market value but rather a distress sale, as Cokal identified these concessions as non-core assets and sold these to focus on its flag ship project.

Cahaya Lembusuana (CL) has a 2,310 ha of concession area and located in the East Kalimantan Region. The concession is strategically located close to Geo energy's flag ship project Parisma Jaya Abad . At the time of announcement of acquisition, CL contained with an estimated Non JORC mineable coal of 2.3 Mt, and an estimated calorific value of 6,500-7,1001 kcal/kg, adb. Subsequently, Geo Energy announced that the , acquisition CL did not proceed was due to failure of the vendor to comply with certain conditions precedent..

Cokal purchased the Tuggal Putra Nusantara project in West Sumatra region from PT Tuggal Putra Nusantara in June 2014 at an implied value of $1,500/ha. This project can be considered as an early stage exploration project located in West Sumatra. It had an intermittently operating small scale anthracite coal mine. Considering the coal quality, Salva Mining's is in the opinion that implied value from this transaction can be considered as an upper bound range for the BSL North Block concession.

Kilara Resources acquired the Borneo Emas Hitam project in East Kalimantan in May 2013 with an implied value of $2,745/ha. At the time of acquisition, Borneo Emas Hitam concession with an area of 1,002 ha was in 'clean and clear list' by Indonesia's department of Energy and Mineral Resources. The project is located in the East Kalimantan province and is closer to the coast (barging around 150km). In terms of coal quality, the coal samples tested from the outcrops ranged from 5,459 kcal/kg - 7,546 kcal/kg with an average of 6,948 kcal/kg (high CV coal). In Salva Mining's opinion, Borneo Emas Hitam project is a superior project as compared to the BSL North Block and should be valued at a higher unit rate.

PHI Group purchased the Tambang Sekarsa Adadaya project in West Sulawesi in January 2013. At the time of the transaction, it was announced that the concession has a coal resource of 276 Mt; however, the validity of this statement is doubtful as this is not based on any drilling. It is therefore considered reasonable to include this transaction as an exploration project with an implied value of $1,548/ha.

Indus Coal purchased Batubara Energi Prima and Berlian Mahkota project in Jambi region in Sumatra in January 2013. The geological settings for this project are somewhat similar to the BSL North Block. However, Salva Mining considers the coal quality at this project is to be inferior to the BSL North Block (low rank vs. mid rank at BSL North Block). Further, it appears that the coal logistics from this project may be challenging as compared to existing road and river port for BSL North Block. Therefore, in Salva Mining's opinion, the implied value of $1,118/ha from this transaction should be considered as lower bound valuation range for the BSL North Block.

PT Harum Energy purchased Karya Usaha Pertiwi project in September 2012. This project was located in close proximity to the concession already owned by Harum Energy. The Karya Usaha Pertiwi Project was better explored than BSL North Block. Additionally, the Karya Usaha Pertiwi concession is located in established mining region of East Kalimantan with significant amount of established and operating coal mines and sufficient coal hauling infrastructure. Therefore, in Salva Mining's opinion, the Karya Usaha Pertiwi concession is a superior project than the BSL North Block and this should be valued at a higher unit rate.

Considering the location, geological factors and other micro and macro-economic parameters which could affect the project economics in Salva Mining's opinion the implied value of BSL North Block should be in the range of $1,100/ha to $1,500/ha with a preferred value of $1,300/ha. This valuation range can be considered appropriate for the project at its this stage of development.

Therefore, based on market transactions, the valuation of the BSL North Project area beyond current resources boundary is in the range of $17.2M to $23.4M with a preferred value of $20.3M is deemed appropriate, reflecting the uncertainty of eventual extraction of a coal seams. A summary of Salva Mining's market based valuation is presented in Table 6:3.

Table 6:3 Market Based Valuation, BSL North Block

Item	Area (ha)	Selected Value (US $/ha)			Market Value (US $ M)		
		Lower	Preferred	Upper	Lower	Preferred	Upper
North Block	15,605	1,100	**1,300**	1,500	17.2	**20.3**	23.4

6.4 Valuation using Geo-Scientific Rating Method

Geo-Scientific rating (or Kilburn method), is used to value early stage exploration assets. This method is an attempt by the valuation expert to quantify the various technical aspects of a property through the use of multipliers which are applied to a base or intrinsic value (Goulevitch J & Eupene G S, 1994 and Kilburn, 1990). This intrinsic value is known as the base holding cost (BHC) which represents "the average cost to identify, apply for and retain a base unit of area of title".

To arrive at a value for a mineral asset, the valuation expert considers four key attributes which either enhance or downgrade the BHC of each property. The technical factors considered are:

- the Off-property factor – nearby properties containing physical indications of favourable mining conditions such as old workings and/or mines;
- The On-property factor – the property being assessed hosts favourable mining indications such as historic workings or mines. Importantly any mineralisation capable of supporting a

Mineral Resource estimate, compliant according to the guidelines of the JORC Code, will also be assessed using other valuation methods;

- the Anomaly factor – assesses the degree of exploration completed over the property and the number of resultant mineralised targets identified; and
- The Geological factor – assesses the area covered by and degree of exposure of favourable rock types and/or structures (if this is related to the mineralisation style being assessed) within the property.

These attributes are given incremental, fractional or integer ratings to arrive at a series of multiplier factors. These multipliers are then applied sequentially to the BHC to estimate the Technical Value of each mineral property. This is adjusted for local market conditions to determine the Fair Market Value of the project as at the effective valuation date. The strength of the geo-scientific method is that it makes an attempt to implement a systematic system. Whilst it does require a subjective assessment of the various multipliers, it also demands a degree of detached rigor to account for the key factors that can be reasonably considered to impact on the exploration potential of a property.

Salva Mining multipliers or ratings and the criteria for rating selection are summarised in Table 6:4.

Table 6:4 Geo-Scientific Rating Criteria

Rating	Off property Factor	On Property Factor	Anomaly Factor	Geological Factor
0.1			No anomaly identified	Unfavourable geological setting
0.5			Extensive previous exploration gave poor results	Poor geological setting
0.9			Poor results to date	Generally favourable geological setting, under cover
1.0	No known mineralisation in district	No known mineralisation on lease	No targets outlined	Generally favourable geological setting
1.5	Minor workings	Minor workings or mineralised zones exposed	Target identified, initial indications positive	
2.0	Several old workings in district	Several old workings or exploration targets identified		Favourable geological setting with structures or mineralised zones
2.5			Significant grade intercepts evident but not linked on cross or long section	
3.0	Mine or abundant workings with significant previous production	Mine or abundant workings with significant previous production		Significant mineralised zones exposed in prospective host rocks
3.5			Several economic	

4.0	Along strike from a major deposit(s)	Major mine with significant historical production	grade intercepts on adjacent sections	
5.0	Along strike of world class deposit			
10.0		World class mine		

(Kilburn, modified by Salva Mining)

To determine fair market value for the BSL North Block concession based on Geo-scientific method, Salva Mining has assumed a Base Holding Cost of $375/km2. This base holding cost is estimated as the minimum cost to hold the tenement per annum. Typically, it includes license and minimum expenditure requirements.

Appropriate multiplying factors have been chosen for the BSL North Block concession and technical value has been calculated. In Salva Mining's opinion, based on Geo-Scientific Method of Valuation, the value of the BSL North Block concession lies in the range between $11.2 M to $29.3 M with a preferred value of $20.3 M (Table 6:5).

Table 6:5 Geo-Scientific Method Valuation

Range	Area (km2)	BHC ($/km2)	Geo-Scientific Factors				Value ($M)
			Off Property Factors	On Property Factors	Anomaly Factors	Geological Factors	
Low	156.05	375	4	3	4	4	11.2
High			5	4	5	5	29.3
Preferred Value ($M)							**20.3**

SALVA
Mining Consultants

7 Valuation Summary

In forming its opinion of the fair market value of the BSL North Block concession, Mining has taken guidance from the Geoscientific Rating method and comparable transactions method.

Based on Comparable Market Transaction and Geoscientific Rating method, Salva Mining has derived a valuation range for 100% of the BSL North Block concession of between $14.2M and $26.4M with a preferred value of $20.3M. A summary of Salva Mining valuation for the BSL North Block concession is presented in Table 7:1 below.

Table 7:1 Valuation Summary

Valuation Method	Values (US $M)		
	Low	Preferred	High
Market Comparable	17.2	20.3	23.4
Geo-Scientific Rating	11.2	20.3	29.3
BSL – North Block Concession (100% value)	14.2	**20.3**	26.4

7.1 Discussion on Salva Mining's Valuation Range

In assigning its valuation range and preferred value, Salva Mining has relied largely upon the geoscientific rating method, with minor adjustments to Salva Mining's value range as indicated by other valuation techniques. Salva Mining is mindful of the large valuation range outlined by the geoscientific rating method but considers this is also indicative of the uncertainty associated with early stage exploration assets.

The wide range in value is driven by the confidence limits placed around the size and quality of the exploration targets assumed to occur within each project area. Typically this means that as exploration progresses and a prospect moves from an early to advanced stage prospect, through Inferred, Indicated or Measured Resource categories to Ore Reserve status, there is greater confidence around the likely size and quality of the contained mineralization and its potential to be extracted profitably. Table 7:2 presents a general guide of the confidence in targets, resource and reserve estimates, and hence value, referred to in the mining industry (Bouchard, 2001; Snowden et al., 2002; Mackenzie and Cusworth, 2007; Macfarlane, 2007).

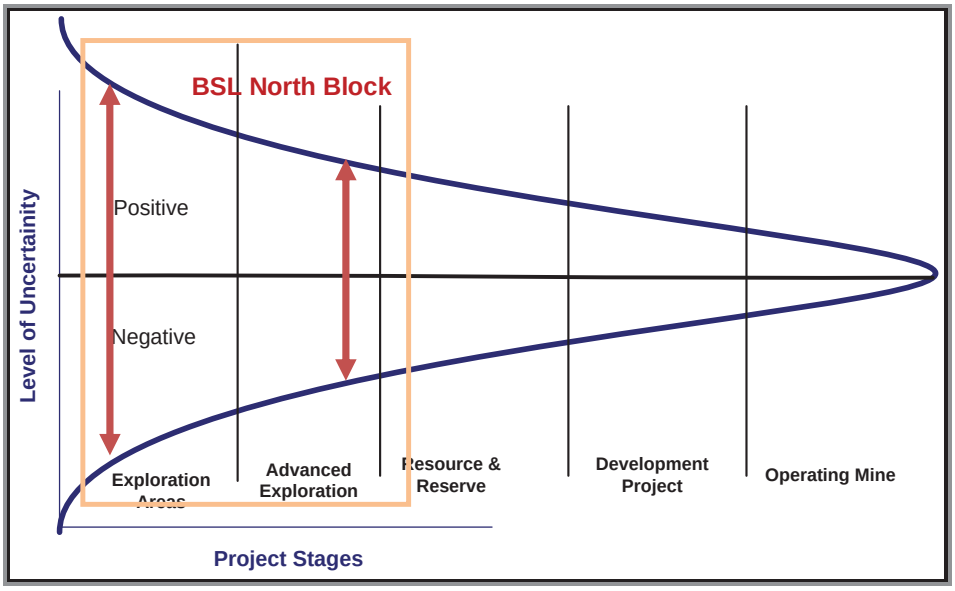
Table 7:2 General Guideline - Confidence for Target and Resource Estimates

Classification	Estimate Range (90% Confidence Limit)
Proven/Probable Reserves	±5 to 10%
Measured Resources	±10 to 20%
Indicated Resources	±30 to 50%
Inferred Resources	±50 to 100%
Exploration target	±100%

This level of uncertainty with advancing project stages can be seen in Figure 7:1.

SALVA
Mining Consultants

Figure 7:1 Uncertainty by Exploration Stage



Estimate confidence of plus or minus 60% to 100% or more are not uncommon for exploration targets and are within acceptable bounds given the level of uncertainty associated with early stage exploration assets. By applying narrower confidence ranges, one is actually implying a greater degree of certainty regarding these assets than may be the case in reality.

BSL North Block is exploration assets in the early stages of assessment and therefore there are significant uncertainties around their attributes. This results in a wide valuation range. Where possible, Salva Mining has endeavoured to narrow its valuation range. Where Salva Mining is not aware of any reason why the value should be towards the higher or lower end of its value range, Salva Mining has applied the midpoint of its value range as its preferred value.

7.2 Previous Valuation

Salva Mining has carried out previous valuation for the BSL North Block in 1 April 2017. and assigned the value as US $21.5M. There is no material change in the valuation of the concession.

SALVA
Mining Consultants

8 Risk Factors

Salva Mining has identified a range of risk elements or risk factor which may affect the future operations and financial performance of the concessions. Some of the risk factors are completely external, which is beyond the control of management. However, the project specific risk can be mitigated by taking proper measure in advance. Key Project risks that have been identified are discussed below.

8.1 Project Risks

8.1.1 Resources and Reserves

No coal resource and reserve has been defined for the BSL North Block. Moving forward, it may be possible that further exploration and technical studies may not result in delineation of any Coal Reserve which would have a material impact on the technical value of the concession.

8.1.2 Coal Price Risk

Coal prices and the demand for coal are cyclical in nature and subject to significant fluctuations, and any significant decline in the prices of coal or demand for coal could materially and adversely affect the Company's business and financial condition results of operations and prospects. Coal markets are highly competitive and are affected by factors beyond the Company's control which include but not limited to:

- Economic conditions in Indonesia and globally;
- Government actions; and
- Fluctuations in industries with high coal demand such as Power Sector and other industries using thermal coal.

Although sufficient analysis and studies have been conducted to ascertain future long term forecasts, if there is a fall in long term prices there would be a substantial reduction in the value of the project.

8.1.3 Mine Infrastructure Associated Risk

Conventional open pit mining at BSL South Block started at the end of 2016. It is assumed that the coal from the BSL North Block will use the same coal haulage road as that's being currently used for BSL South Block. The condition of these road infrastructure may needs to be reassessed to ascertain capacity and it may be possible that some of these may have to be refurbished.

8.1.4 Mining Approvals, Tenure and Permits

During the course of mining, a number of government permits and approvals may be required to ramp up the capacity of the Mines and the associated infrastructure facilities. Any delays in obtaining the required approvals may affect the production expansion and the mine plan. This may likely to cause the project to overrun which may significantly affect project capital and operating costs.

8.1.5 Land Acquisition

Most mining operations in Indonesia are facing issues in acquiring land for their projects. Acquiring land and compensating land owners is considered to be a significant issue, especially in areas which are densely populated.

In order to achieve the value estimated in this study, will need to identify key land owners in advance so that an appropriate settlement can be reached and no interruptions to the development of the project will occur. Land compensation will be required for mining areas, dumping areas and infrastructure construction. Salva Mining is not aware of any specific land compensation issues with the concession at the current time that may affect this valuation. However, it is considered possible that delays to land compensation and associated interruptions to the project may occur in the future and that this may have a material impact on the value of the concession.

8.1.6 Environmental and Social Risks

While environmental and social risks have been identified and management plans are in place, it is possible that failure to comply with the environment criteria or failure to maintain good relationships with the local community will have an impact on project value. These risks are not considered to be greater for the Mine than for other operating coal mines operating in Indonesia.

8.1.7 Political and Regulatory Risk

Since 2009, Indonesian mining has been governed by the Central Government's "New Mining Law", enacted to provide greater opportunity for the industry to expand to meet growing Asian demand. The Mining Law aimed to reflect the Government of Indonesia's ("GoI") desire to recognise the financial benefits of its own natural resources, by ensuring that the GoI had greater input into resource extraction. The major developments from the 2009 Mining Law have been the Domestic Market Obligation (DMO) and Export Benchmark Pricing (HBA).

Some future regulations may include a coal export tax or ban on certain qualities, stricter coal road transportation rules and alignment of IUP and CCOW royalty rates. The actual implementation of these new aspects of the law is still unclear and many contract holders are currently in negotiation with the Indonesian government regarding this issue. Issues likes DMO, Coal upgrading requirements, Export taxes, Minimum Pricing Regulations and Foreign Ownership Restriction of the new law may affect the valuation of the concession. Some of these provisions, such as export ban and increase in royalty rate may have material impact on the project valuation

References

JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code – 2012 Edition [online], The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia. Available from: http://www.jorc.org/docs/jorc_code2012.pdf [Accessed: 31 December 2017].

Makes & Partners Law Firm, Report on Mining Rights for BSL Coal Concessions dated 2 February 2018.

Lucarelli B, 2010, The History and Future of Indonesia's Coal Industry: Impact of Politics and Regulatory Framework on Industry and Performance, Working Paper No93, PESD Stanford, Program of Energy and Sustainable Development (July 2010)

VALMIN, 2015. Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code) Available from: http://www.valmin.org/docs/VALMIN_Code_2015_final.pdf [Accessed: 31 December 2017].

SALVA Mining Consultants

Appendix A – CVs

Person	Role
Manish Garg (Director)	
Qualification	B. Eng. (Hons), MAppFin
Prof. Membership	MAusIMM; MAICD
Contribution	Overall Supervision, Economic Assessment (VALMIN 2005)
Experience	Manish has more than 25 years' experience in mining Industry. Manish have worked for mining majors including Vedanta, Pasminco, WMC Resources, Oceanagold, BHP Billiton - Illawarra Coal and Rio Tinto Coal. Manish has been in consulting roles for past 10 years predominately focusing on feasibility studies, due diligence, valuations and M&A area. A trusted advisor, Manish has qualifications and wide experience in delivering due diligences, feasibility studies and project valuations for banks, financial investors and mining companies on global projects, some of these deals are valued at over US$5 billion.
Sonik Suri (Principal Consultant - Geology)	
Qualification	B. Sc. (Hons), M.Sc. (Geology)
Prof. Membership	MAusIMM
Contribution	Geology, Resource (JORC 2012)
Experience	Sonik has more than 25 years of experience in most aspects of geology including exploration, geological modelling, resource estimation and mine geology. He has worked for coal mining majors like Anglo American and consulting to major mining companies for both exploration management and geological modelling. As a consultant he has worked on audits and due diligence for companies within Australia and overseas. He has strong expertise in data management, QA/QC and interpretation; reviews/audits of geological data sets; resource models and resource estimates.
Dr Ross Halatchev (Principal Consultant - Mining)	
Qualification	B. Sc. (Mining), M.Sc., Ph.D. (Qld)
Prof. Membership	MAusIMM
Contribution	Mine Scheduling, Reserve (JORC 2012)
Experience	Ross is a mining engineer with 30 years' experience in the mining industry across operations and consulting. His career spans working in mining operations and as a mining consultant primarily in the mine planning & design role which included estimation of coal reserves, DFS/FS, due diligence studies, techno-commercial evaluations and technical inputs for mining contracts. Prior to joining Salva Mining, Ross was working as Principal Mining Engineer at Vale. To date Ross has worked on over 20 coal projects around the world, inclusive of coal projects in Australia, as well as in major coalfields in Indonesia, Mongolia and CIS.

SALVA
Mining Consultants

Appendix B – Valuation Approaches

Valuation Considerations

To ensure compliance with the ASX's listing rules and Australian Corporations Law, this Report has been prepared in accordance with the VALMIN Code.

Under the VALMIN Code, mineral assets are classified according to their maturity. A *mineral asset* includes all property held for the purpose of near term or eventual mineral extraction, including but not limited to:

- real property
- intellectual property
- concessions, plant, equipment and associated infrastructure.

Most mineral assets can be classified as outlined in Table below.

Mineral Asset Classification

Project development stage	Criterion
Exploration areas	Mineralisation may or may not have been defined, but where a Mineral Resource has not been identified.
Advanced exploration areas	Considerable exploration has been undertaken and specific targets identified. Sufficient work has been completed on at least one prospect to provide a good geological understanding and encouragement that further work is likely to result in the determination of a Mineral Resource.
Pre-development / Resource	Mineral Resources and/or Ore Reserves have been identified estimated. A positive development decision has not been made. This includes properties where a development decision has been negative and properties are either on care and maintenance or held on retention titles.
Development	Committed to production but not yet commissioned or not initially operating at design levels.
Operating	Mineral properties, in particular mines and processing plants, which have been fully commissioned and are in production.

Source: VALMIN, 2015

Under the VALMIN Code, *value* is the fair market value of a mineral asset (2005). Fair market value is the amount of money or the cash equivalent that a willing buyer and seller would exchange on the valuation date in an arm's length transaction (VALMIN, 2005). Each party is assumed to have acted knowledgeably, and without compulsion. In essence, fair market value is comprised of:

- Underlying or 'technical value' - a mineral asset's future economic benefit under a set of assumptions, excluding any premium or discount for market, strategic, or other considerations.
- Market component - a premium relating to market, strategic or other considerations, which can be either positive, negative, or zero.

The market value should include all material information to the asset. For projects with extensive technical detail, the valuer determines materiality of information based on whether its inclusion would result in the valuation reaching a different conclusion.

There is no single method of valuation that is appropriate for all situations. Rather, there are several valuation methods, each of which have some merit and are more or less applicable depending on the circumstances. Mineral assets are generally valued based on approaches that assess income, cost, and the open market. As the VALMIN Code is not prescriptive in this regard, the 2008 Edition of *The South African Code for the Reporting of Mineral Asset Valuation* (SAMVAL) and the Canadian 2003 Edition of *The Standards and Guidelines for Valuation of Mineral Properties* (CIMVAL) provide insight into applicable approaches, as shown in the Table below.

Valuation Approaches for Different Types of Mineral Assets

Approach	Project development stage			
	Exploration	Resource	Development	Operating
Income	No	Rarely	Yes	Yes
Cost	Yes	Rarely	No	No
Market	Yes	Yes	Yes	Yes

Source: VALMIN, 2015

Income-Based Approach:

Discounted Cash Flow Analysis

The DCF method is the dominant valuation tool used in the mining industry for Pre-development, Development and Operating Mine projects. While the DCF method is not typically used for the valuation of Exploration Assets given the inherent uncertainties associated with the projects, Xstract has used a conceptual DCF model in applying the geological risk approach to assist in forming its opinion of the South Blackwater project.

The DCF method is based upon the widely accepted theory that the value of a project depends upon the anticipated future cash flows discounted back to a NPV at an appropriate discount rate. This process allows perceived capital and operating costs, royalties, taxes, and project financing requirements to be analysed in conjunction with a discount rate to reflect the risk profile of the project. The process is typically based on the prevailing economic conditions or a specified set of assumptions.

The DCF method requires the Expert to predict the cash flow profile and an appropriate rate of return for the project over its entire economic life. As such, the method requires that the Ore Reserves, or at least Measured and Indicated Resources, and mining / processing parameters are relatively well defined.

The critical input into the DCF model is the life-of-mine ("LOM") plan, which is normally produced as part of a pre-feasibility or definitive feasibility study. These studies should provide detailed information regarding:

- the project's resource/reserve position
- the forecast mine production profile (in tonnes on a monthly or annual basis)
- grade distribution and recoveries
- forecast operating costs
- anticipated start-up
- ongoing capital requirements and closure costs (including rehabilitation and retrenchment)

- other specific liabilities (i.e. royalties, taxes, etc) associated with the project.

The applied discount rate is often highly subjective, but should reflect the perceived technical and financial risks as well as the depleting value of the mineral asset over time.

Market-Based Approach:

The Market-Based Approach uses the transaction prices of projects in similar geographical, geopolitical, and geological environments to derive a market value using a process similar to that in the real estate industry (CIMVAL, 2003). The market-based approach may use the assumption either of joint venture terms or outright acquisitions, and can be presented in range of unitised values including on a dollar per ounce or tonne of contained metal/mineral; dollar per square kilometre; or as a percentage of the prevailing commodity price.

In the HDR's opinion, a market-based approach is well suited to establishing a likely value for mineral deposits and exploration projects, as it inherently takes into account all value drivers.

Related Comparable Transactions

Recent comparable transactions can be relevant to the valuation of projects and concessions. While it is acknowledged that it can be difficult to determine to what extent the properties and transactions are indeed comparable, unless the transactions involve the specific parties, projects or concessions under review, this method can provide a useful benchmark for valuation purposes. The timing of such transactions must be considered as there can be substantial change in value with time.

HDR has considered whether any comparable relevant transactions have taken place in recent years which can be used as a basis for estimation of value of the mining assets assessed herein.

As no two mineral assets are the same, the Expert must be cognisant of the quality of the assets in the comparable transactions, with specific reference to:

the grade of the resource
the metallurgical qualities of the resource
the proximity to infrastructure such as an existing mill, roads, rail, power, water, skilled work force, equipment, etc.
likely operating and capital costs
the amount of pre-strip (for open pits) or development (for underground mines) necessary
the likely ore to waste ratio (for open pits)
the size of the concession covering the mineral asset, and
the overall confidence in the resource.

Alternative Offers and Joint Venture Terms

If discussions have been held with other parties and offers have been made on the project or concessions under review, then these values are certainly relevant and worthy of consideration. Similarly, joint venture terms where one party pays to acquire an interest in a project, or spends exploration funds in order to earn an interest, provide an indication of value.

SALVA Mining Consultants

Rules of Thumb or Yardsticks

Certain industry ratios are commonly applied to coal mining projects to derive an approximate indication of value. The most commonly used ratios are dollars per tonne of coal in resources, dollars per tonne of coal in reserves, and dollars per tonne of annual production. The ratios used commonly cover a substantial range which is generally attributed to the 'quality' of the coal, the infrastructure to reach markets and the status of the tonnes estimates. Low cost of production tonnes are clearly worth more than high cost tonnes. Where a project has substantial future potential not yet reflected in the quoted resources or reserves a ratio towards the high end of the range may be justified.

Other Expert Valuations

Where other independent experts or analysts have made recent valuations of the same or comparable properties, these opinions clearly need to be reviewed and to be taken into consideration.

Cost-Based Approaches:

Appraised Valuation or Multiple of Exploration Expenditure Method (MEE)

Past expenditure, or the amount spent on exploration of a concession is commonly used as a guide in determining the value of exploration concessions, and 'deemed expenditure' is frequently the basis of joint venture agreements. The assumption is that well directed exploration has added value to the property. This is not always the case and exploration can also downgrade a property and therefore a 'prospectively enhancement multiplier' (PEM), which commonly ranges from 0.5-3.0, is applied to the effective expenditure. The selection of the appropriate multiplier is a matter of experience and judgement.

To eliminate some of the subjectivity with respect to this method, HDR applies a scale of PEM ranges as follows to the exploration expenditure:

Prospectively Enhancement Multipliers

PEM	Rationale
0.5 -1.0	Previous exploration indicates the area has limited potential.
1.0 -1.5	The existing (historical and/or current) data consists of pre-drilling exploration and the results are sufficiently encouraging to warrant further exploration.
1.5 -2.0	The prospect contains one or more defined targets warranting additional exploration.
2.0 -2.5	The prospect has one or more targets with significant drill hole intersections.
2.5 -3.5	Exploration is well advanced and in-fill drilling is required to define a Resource.
5.0	A Resource has been defined but a (recent) pre-feasibility study has not yet been completed

Over-riding any mechanical or technical valuation method for exploration ground must be recognition of prospectivity and potential, which is the fundamental value in relation to exploration properties.

SALVA Mining Consultants

Geoscientific Rating

The Geoscientific rating, or Kilburn approach, attempts to quantify the technical aspects of a property through the use of multipliers which are applied to a base or intrinsic value. This intrinsic value is known as the BAC which represents "the average cost to identify, apply for and retain a base unit of area of title". Different practitioners use slightly differing approaches to calculate the BAC.

The value of each property is determined through grading four technical attributes, which either enhance or degrade the value of a property. The factors comprise off-property attributes, on-property attributes, anomalies and geology. The attributes are given incremental ratings to arrive at a series of multiplier factors. These multipliers are applied sequentially to the BAC to estimate the Technical Value of each mineral property. A fifth factor reflecting the current state of the market is applied to estimate the Market Value.

Salva Mining's multipliers or ratings and the criteria for rating selection are summarised in table below.

Metal Rating Criteria (modified by Salva Mining)

0.1				Unfavourable geological setting
0.5			Extensive previous exploration gave poor results	Poor geological setting
0.9			Poor results to date	Generally favourable geological setting, under cover
1.0	No known mineralisation in district	No known mineralisation on lease	No targets outlined	Generally favourable geological setting
1.5	Minor workings	Minor workings or mineralised zones exposed	Target identified, initial indications positive	
2.0	Several old workings in district	Several old workings or exploration targets identified		Favourable geological setting with structures or mineralised zones
2.5			Significant grade intercepts evident but not linked on cross or long section	
3.0	Mine or abundant workings with significant previous production	Mine or abundant workings with significant previous production		Significant mineralised zones exposed in prospective host rocks
4.0			Several economic grade intercepts on adjacent sections	
5.0	Along strike from a major mine(s)	Major mine with significant historical production		
7.0	Along strike of world class mine			
10.0		World class mine		

The Geoscientific method was extended by Sandri and Abbott in 2000 to incorporate additional multipliers for location and marketability.

GOLDEN ENERGY AND RESOURCES LIMITED

(Incorporated in the Republic of Singapore)
(Company Registration No. 199508589E)

NOTICE IS HEREBY GIVEN that an Extraordinary General Meeting of **GOLDEN ENERGY AND RESOURCES LIMITED** (the "**Company**") will be held at Guild Room, NUSS The Graduate Club, Suntec City Guild House, 3 Temasek Boulevard (Tower 5) #02-401/402, Suntec City Mall, Singapore 038983 on 13 July 2018 at 10.00 a.m. for the purpose of considering and, if thought fit, passing, the following resolution:

Unless otherwise defined, all capitalised terms used herein shall bear the same meaning ascribed thereto in the Company's Circular to Shareholders dated 28 June 2018 in respect of the resolution herein.

ORDINARY RESOLUTION

THE PROPOSED ACQUISITION AS AN INTERESTED PERSON TRANSACTION, COMPRISING:

(1) THE PROPOSED ACQUISITION OF 100% SHAREHOLDING INTEREST IN PT BARASENTOSA LESTARI, PT UNSOCO, PT DUTA SARANA INTERNUSA AND PT DWIKARYA SEJATI UTAMA ("SALE SHARES ACQUISITION"); AND

(2) THE PROPOSED ACQUISITION OF US$6,368,158 MANDATORY CONVERTIBLE BONDS ("MCB ACQUISITION").

That the Proposed Acquisition (comprising the Sale Shares Acquisition and the MCB Acquisition) be and is hereby approved and that approval be and is hereby given to the Directors:

(a) to carry out and implement the Proposed Acquisition (comprising the Sale Shares Acquisition and the MCB Acquisition) in accordance with the Sale and Purchase Agreement, as well as any other transactions contemplated under the Sale and Purchase Agreement; and

(b) to complete and do all such acts and things, including without limitation, executing all such documents and approving any amendments, alterations or modifications to any documents as they may consider expedient or necessary or in the interests of the Company to give effect to the transactions contemplated by the Sale and Purchase Agreement and/or this Resolution.

BY ORDER OF THE BOARD

Pauline Lee
Company Secretary
Singapore, 28 June 2018

Notes:

1. (i) A member (who is not a relevant intermediary) of the Company entitled to attend and vote at the Extraordinary General Meeting ("**EGM**") of the Company is entitled to appoint not more than two proxies to attend, speak and vote on his behalf and where a member appoints more than one proxy, the proportion of the shareholding concerned to be represented by each proxy shall be specified in the Proxy Form.

   (ii) A member (who is a relevant intermediary) of the Company entitled to attend and vote at the EGM of the Company is entitled to appoint more than two proxies to attend, speak and vote on his behalf, but each proxy must be appointed to exercise the rights attached to a different share or shares held by such member. Where such member's Proxy Form appoints more than two proxies, the proportion of the shareholding concerned to be represented by each proxy shall be specified in the Proxy Form.

   "relevant intermediary" has the meaning ascribed to it in Section 181(6) of the Companies Act.

2. A proxy need not be a member of the Company.

3. Each of the resolutions to be put to the vote of members at the EGM (and at any adjournment thereof) will be voted on by way of a poll.

4. The instrument appointing a proxy must be deposited at the Registered Office of the Company at 20 Cecil Street #05-05 PLUS, Singapore 049705 not less than seventy-two (72) hours before the time appointed for holding the EGM.

PERSONAL DATA PRIVACY:

By submitting an instrument appointing a proxy(ies) and/or representative(s) to attend, speak and vote at the EGM and/or any adjournment thereof, a member of the Company (i) consents to the collection, use and disclosure of the member's personal data by the Company (or its agents) for the purpose of the processing and administration by the Company (or its agents) of proxies and representatives appointed for the EGM (including any adjournment thereof) and the preparation and compilation of the attendance lists, minutes and other documents relating to the EGM (including any adjournment thereof), and in order for the Company (or its agents) to comply with any applicable laws, listing rules, regulations and/or guidelines (collectively, the "**Purposes**"), (ii) warrants that where the member discloses the personal data of the member's proxy(ies) and/or representative(s) to the Company (or its agents), the member has obtained the prior consent of such proxy(ies) and/or representative(s) for the collection, use and disclosure by the Company (or its agents) of the personal data of such proxy(ies) and/or representative(s) for the Purposes, and (iii) agrees that the member will indemnify the Company in respect of any penalties, liabilities, claims, demands, losses and damages as a result of the member's breach of warranty.

This page has been intentionally left blank.

PROXY FORM

IMPORTANT

1. A relevant intermediary may appoint more than two proxies to attend the EGM and vote (please see note 4 for the definition of "**relevant intermediary**").
2. For investors who have used their CPF monies to buy shares of GOLDEN ENERGY AND RESOURCES LIMITED, this Circular to Shareholders dated 28 June 2018 is forwarded to them at the request of their CPF Approved Nominees and is sent solely FOR INFORMATION ONLY.
3. This Proxy Form is not valid for use by CPF Investors and shall be ineffective for all intents and purposes if used or purported to be used by them.

GOLDEN ENERGY AND RESOURCES LIMITED

(Incorporated in the Republic of Singapore)
(Company Registration No. 199508589E)

PROXY FORM
(Please see notes overleaf before completing this Form)

I/We*,_____(name) of _____
_____(address) being a member/members of **GOLDEN ENERGY AND RESOURCES LIMITED** (the "**Company**"), hereby appoint :

Name	**NRIC / Passport**	**Proportion of Shareholdings**	
		No. of Shares	**%**
Address			

and/or (delete as appropriate)

Name	**NRIC / Passport**	**Proportion of Shareholdings**	
		No. of Shares	**%**
Address			

or failing the person, or either or both of the persons, referred to above, the Chairman of the Extraordinary General Meeting ("**EGM**"), as *my/our *proxy/proxies to attend and to vote for *me/us on *my/our behalf and at the EGM of the Company to be held at Guild Room, NUSS The Graduate Club, Suntec City Guild House, 3 Temasek Boulevard (Tower 5) #02-401/402, Suntec City Mall, Singapore 038983 on 13 July 2018 at 10.00 a.m. and at any adjournment thereof. I/We direct my/our proxy/proxies to vote for or against the Resolution proposed at the EGM as indicated hereunder. If no specific direction as to voting is given, the proxy/proxies will vote or abstain from voting at his/her/their discretion, as he/she/they will on any other matter arising at the EGM and at any adjournment thereof.

(Voting will be conducted by poll. If you wish to exercise all your votes "For" or "Against" the Resolution, please indicate with an "✓" within the box provided. Alternatively, please indicate the number of shares in the box provided.)

Ordinary Resolution	**For**	**Against**
The Proposed Acquisition as an interested person transaction, comprising: (1) The Proposed Acquisition of 100% shareholding interest in PT Barasentosa Lestari, PT Unsoco, PT Duta Sarana Internusa and PT Dwikarya Sejati Utama; and (2) The Proposed Acquisition of US$6,368,158 Mandatory Convertible Bonds.		

Dated this _____ day of _____ 2018

_____
Signature of Shareholder(s) or Common Seal of Corporate Shareholder

**Delete where inapplicable*

IMPORTANT: PLEASE READ NOTES OVERLEAF

	Total number of Shares in
(a) CDP Register	
(b) Register of Members	

PROXY FORM

Notes:

1. Please insert the total number of Shares held by you. If you have Shares entered against your name in the Depository Register (as defined in Section 81SF of the Securities and Futures Act (Cap. 289) ("**SFA**")), you should insert that number of Shares. If you have Shares registered in your name in the Register of Members, you should insert that number of Shares. If you have Shares entered against your name in the Depository Register and Shares registered in your name in the Register of Members, you should insert the aggregate number of Shares entered against your name in the Depository Register and registered in your name in the Register of Members. If no number is inserted, the instrument appointing a proxy or proxies shall be deemed to relate to all the Shares held by you.

2. A member of the Company entitled to attend and vote at the EGM is entitled to appoint not more than two proxies to attend and vote in his/her stead. A proxy need not be a member of the Company.

3. Where a member appoints two proxies, the appointments shall be invalid unless he/she specifies the proportion of his/her shareholding (expressed as a percentage of the whole) to be represented by each proxy.

4. A member who is a relevant intermediary entitled to attend the EGM and vote is entitled to appoint more than two proxies to attend and vote instead of the member, but each proxy must be appointed to exercise the rights attached to a different Share or Shares held by such member. Where such member appoints more than two proxies, the appointments shall be invalid unless the member specifies the number of Shares in relation to which each proxy has been appointed.

   "relevant intermediary" means:

   (a) a banking corporation licensed under the Banking Act (Cap. 19) or a wholly-owned subsidiary of such a banking corporation, whose business includes the provision of nominee services and who holds shares in that capacity;

   (b) a person holding a capital markets services licence to provide custodial services for securities under the SFA and who holds shares in that capacity; or

   (c) the Central Provident Fund Board established by the Central Provident Fund Act (Cap. 36), in respect of shares purchased under the subsidiary legislation made under that Act providing for the making of investments from the contributions and interest standing to the credit of members of the Central Provident Fund, if the Board holds those shares in the capacity of an intermediary pursuant to or in accordance with that subsidiary legislation.

5. Completion and return of this instrument appointing a proxy shall not preclude a member from attending and voting at the EGM. Any appointment of a proxy or proxies shall be deemed to be revoked if a member attends the EGM in person, and in such event, the Company reserves the right to refuse to admit any person or persons appointed under the instrument of proxy to the EGM.

6. The instrument appointing a proxy or proxies must be deposited at the registered office of the Company at 20 Cecil Street #05-05 PLUS, Singapore 049705 not less than seventy-two (72) hours before the time appointed for the EGM.

7. The instrument appointing a proxy or proxies must be under the hand of the appointor or of his attorney duly authorised in writing. Where the instrument appointing a proxy or proxies is executed by a corporation, it must be executed either under its seal or under the hand of an officer or attorney duly authorised. Where the instrument appointing a proxy or proxies is executed by an attorney on behalf of the appointor, the letter or power of attorney or a duly certified copy thereof must be lodged with the instrument.

8. A corporation which is a member may authorise by resolution of its directors or other governing body such person as it thinks fit to act as its representative at the EGM, in accordance with Section 179 of the Companies Act (Cap. 50).

PERSONAL DATA PRIVACY:

By submitting an instrument appointing a proxy(ies) and/or representative(s), the member accepts and agrees to the personal data privacy terms set out in the Notice of EGM dated 28 June 2018.

GENERAL:

The Company shall be entitled to reject the instrument appointing a proxy or proxies if it is incomplete, improperly completed or illegible, or where the true intentions of the appointor are not ascertainable from the instructions of the appointor specified in the instrument appointing a proxy or proxies. In addition, in the case of shares entered in the Depository Register, the Company may reject any instrument appointing a proxy or proxies lodged if the member, being the appointor, is not shown to have shares entered against his name in the Depository Register as at seventy-two (72) hours before the time appointed for holding the EGM, as certified by The Central Depository (Pte) Limited to the Company.