



GEO ENERGY GROUP

GEO ENERGY RESOURCES LIMITED

(Incorporated in the Republic of Singapore on 24 May 2010)
(Company Registration Number 201011034Z)

Qualified Person's Report

Section 1: SDJ Mine Concession

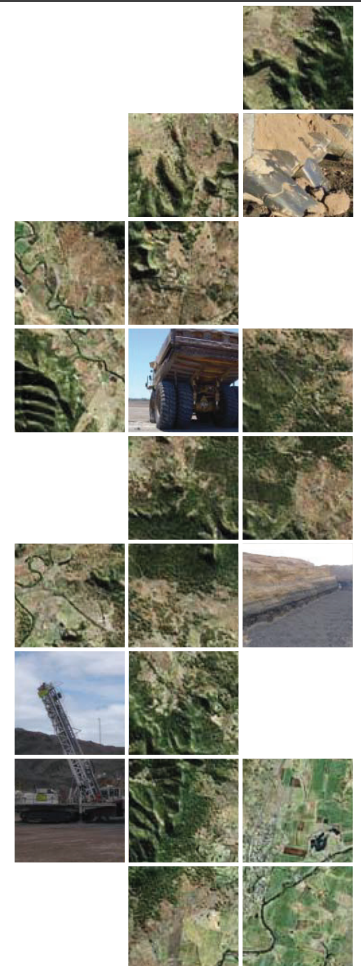
Section 2: BEK Mine Concession

Section 1: Qualified Person's Report
SDJ Mine Concession

Qualified Person's Report December 2015

Prepared For :

Geo Energy Resources Limited



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DISCLAIMER

PT SMG Consultants (SMGC) has prepared this report for the exclusive use of Geo Energy Resources Limited (GERL) for the sole purpose of assessing the PT Sungai Danau Jaya (SDJ) coal concession located in the Angsana and Sungai Lohan sub district, Tanah Bumbu regency, South Kalimantan Province of Indonesia.

The report must be read in light of:

- The report distribution and purposes for which it was intended
- its reliance upon information provided to SMGC by GERL and others
- the limitations and assumptions referred to throughout the report
- the limited scope of the report
- other relevant issues which are not within the scope of the report

Subject to the limitations referred to above, SMGC has exercised all due care in the preparation of the report and believes that the information, conclusions, interpretations and recommendations of the report are both reasonable and reliable based on the assumptions used and the information provided in the preparation of the report.

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- use of the report by the client and third parties shall be at their own risk
- the report speaks only as of the date herein and SMGC has no responsibility to update this report
- the report is integral and must be read in its entirety
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This report has been created using information and data provided by GERL and others. SMGC accepts no liability for the accuracy or completeness of the information and data provided by GERL or any other third party.

This report is made using various assumptions, conditions, limitations and abbreviations. Assumptions are listed on the following page without prejudice to probable omissions.

Assumptions

All previous work is accepted as being relevant and accurate where independent checks could not or were not conducted.

All relevant documentation, along with the necessary and available data to make such a review has been supplied.

Key assumptions, some of which were verified by the client, are accepted as described in the relevant sections of the report.

Conditions

Statements in this document that contain forward looking statements may be identified by the use of forward looking words such as "estimates", "plans", "intends", "expects", "proposes", "may", "will" and include, without limitation, statements regarding GERL's plan of business operations, supply levels and costs, potential contractual arrangements and the delivery of equipment, receipt of working capital, anticipated revenues, mineral Resource and mineral Reserve estimates, and projected expenditures.

It must be noted that the ability to develop infrastructure and bring into operation the proposed mines to achieve the production, cost and revenue targets is dependent on a large number of factors that are not within the control of SMGC and cannot be fully anticipated by SMGC. These factors include but are not limited to site mining and geological conditions, variations in market conditions and costs, performance and capabilities of mining contractors, employees and management and government legislation and regulations. Any of these factors may substantially alter the performance of any mining operation.

The appendices referred to throughout and which are attached to this document are considered to be integral to this report. A copy of the appendices must accompany the report or be provided to all users of the report.

The conclusions presented in this report are professional opinions based solely upon SMGC's interpretations of the information provided by GERL referenced in this report. These conclusions are intended exclusively for the purposes stated herein. For these reasons, prospective estimators 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 SMGC has had no prior knowledge nor had the opportunity to evaluate.

1. EXECUTIVE SUMMARY

1.1 OVERVIEW

PT SMG Consultants (SMGC) was engaged by Geo Energy Resources Limited (GERL) to prepare an independent estimate of Open Cut Coal Resources and Reserves for the PT Sungai Danau Jaya (SDJ) coal concession area located in the Angsana and Sungai Lohan sub district, Tanah Bumbu regency, South Kalimantan Province of Indonesia. SMGC has prepared a JORC Resource statement and a JORC Reserve Statement as at 31 December 2015 prior to commencement of mining in the concession.

The original Resource Statement and the original Reserve Statement have been compiled by Mr. Keith Whitchurch of SMGC. Mr. Whitchurch is a member of The Australasian Institute of Mining and Metallurgy and is a full time employee of SMGC. He has sufficient experience in relevant fields to qualify as Competent Persons under the 2012 JORC code.

This report has been provided to the directors of GERL in relation to reporting Coal Resources and Reserves as at 31 December 2015 as required under the mineral, oil and gas guidelines of the SGX-ST for incorporation into GERL's Annual Report for the 2015; and as such, it should not be used or relied upon for any other purpose. The Coal Resources and Reserves have been reported in accordance with Singapore Stock Exchange (SGX) mineral, oil and gas guidelines, having been classified and reported using the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, December 2012 (the JORC Code 2012). The reader is referred to the original documents for any detailed information which might not be included in this report.

In the context of complying with the Practice Note 6.3 of SGX listing rule, Section 5.4 of the Practice Note 6.3 (Appendix D) has been used as a checklist by SMGC in the preparation of this report and any comments made on the relevant sections of section 5.4 have been provided on an 'if not, why not' basis.

The SDJ concession covers a total 235.5 Ha of area and its tenure is held under an IUP Operasi Produksi, granted on 17 June 2014 and is valid for 8 Years until 29 May 2022. The concession can be reached by an approximately 2 hour domestic flight from Jakarta to Banjarmasin followed by 3 hour trip by car from Banjarmasin to Tanah Bumbu along tarred regional roads. The Project Area is approximately 30 minutes by car from Tanah Bumbu via a regional tarred road and then palm plantation haul road.

A total of 130 boreholes have been drilled in the SDJ Project Area till date. 103 of 130 boreholes are used to estimate the resources in SDJ area. 27 boreholes have been excluded as they fall outside the SDJ concession area and show no correlation with the seams identified in SDJ. The Resource estimation has been limited to 125 m depth following the maximum depth of boreholes. A geological model for the SDJ Project Area was generated using Minex Geologic Modelling Software.

The Coal Resource Report was prepared in compliance with SMGC's interpretation of the 2012 JORC Code published by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy.

The Coal Reserve Report was prepared with a strategic objective of maximizing the tonnage within SDJ Project. The Report was prepared in accordance with SMGC's interpretation of the requirements of the reporting guidelines of the 2012 Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists and Minerals Council of Australia ("The JORC Code"). A separate Life of Mine plan (LOM) was completed by SMGC in close consultation with SDJ planning department in order to substantiate this current Reserve estimate. This was completed to an execution level of detail.

1.2 COAL RESOURCE AND COAL RESERVES TABULATION

Coal Resources reported are based upon relative density grids that have been derived from PT Geoservices Laboratory data. It is to be noted that the Resource estimate is based on extrapolated relative densities from the data supplied by SDJ. The Resource was limited to a depth of 125 m below topography.

A maiden Resource estimate for the concession was prepared by SMGC in December 2014. There has been no further exploration or mining activity within the concession area since this date. As such, there is no material change between this Resource estimate and that calculated and stated by SMGC in their report titled "JORC Resource Statement, PT Sungai Danau Jaya, dated December 2014".

Coal Reserves have been reported in Proved and Probable categories to reflect the reliability of the estimate. No Inferred Coal Resources are included in the reported Coal Reserves. Coal Reserve estimates are based on an execution level life of mine plan which was completed by SMGC in close consultation with SDJ planning department.

An earlier estimate of Reserves was undertaken by SMGC and was dated 31 December 2014. As explained under Section 10 of this report, there are two major areas of the project where some changes have occurred since this last Reserve Statement. However, these changes have had no material impact on the total Reserve base of this project. Therefore the current December 2015 estimate of Reserve is exactly same as that in December 2014 as no mining has taken place.

The combined coal Reserve estimate for SDJ Project has been calculated and is shown in Table 1.1, accompanied by the corresponding coal Resource tabulation.

Table 1.1 – Combined Coal Reserves and Resources as at 31 December 2015

Category	Coal Tonnes (Mt)	Changes from previous Estimate (%)
RESERVES		
Proved	33.4	0.0
Probable	9.0	0.0
Total	42.4	0.0
RESOURCES		
Measured	42.1	0.0
Indicated	14.1	0.0
Inferred	2.2	0.0
Total	58.4	0.0

**This table must be presented with the entire JORC Resource and Reserve Statements from which it was obtained.*

**All values are rounded to the nearest million tonnes.*

2. INTRODUCTION

PT SMG Consultants (SMGC) was engaged by Geo Energy Resources Limited (GERL) to prepare an independent estimate of Open Cut Coal Resources and Reserves for the PT Sungai Danau Jaya (SDJ) coal concession area located in the Angsana and Sungai Lohan sub district, Tanah Bumbu regency, South Kalimantan Province of Indonesia. SMGC has prepared a JORC Resource statement and a JORC Reserve Statement as at 31 December 2015 prior to commencement of mining in the concession.

The original Resource Statement and the original Reserve Statement have been compiled by Mr. Keith Whitchurch of SMGC. Mr. Whitchurch is a member of The Australasian Institute of Mining and Metallurgy and is a full time employee of SMGC. He has sufficient experience in relevant fields to qualify as Competent Persons under the 2012 JORC code.

This Qualified Person's Report has been prepared to provide a market update on Coal Resources and Reserves as at 31 December 2015 as required under the mineral, oil and gas guidelines of the SGX-ST. The reader is referred to the original documents for any detailed information that may not be included in this report.

The concession covers a total 235.5 Ha of area and its tenure is held under an IUP Operasi Produksi, granted on 17 June 2014 and is valid for 8 Years until 29 May 2022. The Southern area of the SDJ concession is classified as Areal Penggunaan Lain (Other Purpose) and thus a "Borrow to Use" Permit (Izin Pinjam Pakai Kawasan Hutan) is not required, but the Northern area is classified as Hutan Produksi Konversi (convertible production forest) and a "Borrow to Use" Permit (Izin Pinjam Pakai Kawasan Hutan) is required from the Forestry Department before mining operations can take place. SDJ have been issued an extension till 29 May 2022 for a limited IPPKH area of 68.90 Ha including the mine, haul road and other infrastructure. This IPPKH is not sufficient to mine all the Reserves in this estimate. Additional IPPKH permits will be necessary to be obtained within one year from commencement of operations to efficiently execute the mine plan which underlies the current Reserve estimate. Any further delay will alter the underlying mine plan which in turn will alter the result of the current Reserve estimate including but not limited to sterilisation of Reserves. In the opinion of SMGC these come under standard permitting procedures and SMGC does not see any reason why they cannot be obtained. However, SMGC makes no warranty or representation to either SDJ or third parties (express or implied) in regard to extension or obtaining any legal permits

Access to the concession area is by an approximately 2 hour domestic flight from Jakarta to Banjarmasin followed by 3 hour trip by car from Banjarmasin to Tanah Bumbu along tarred regional roads. The Project Area is approximately 30 minutes by car from Tanah Bumbu via a regional tarred road and then palm plantation haul road. SMGC undertook a site visit on 26 -27 May 2014 to review ongoing exploration activities.

A total of 130 boreholes have been drilled in the SDJ Project Area till date. 103 of 130 boreholes are used to estimate the resources in SDJ area. 27 boreholes have been excluded as they fall outside the SDJ concession area and show no correlation with the seams identified in SDJ. The Resource estimation has been limited to 125 m depth following the maximum depth of boreholes.

A geological model for the SDJ Project Area was generated using Minex Geologic Modelling Software. The Minex General or Growth method was used for all modelling. The model is composed of information from several datasets that were supplied to SMGC including topographical and collar survey data, borehole lithology data, geophysical records and coal quality data that was entered into a geological database.

The Coal Resource Report was prepared in compliance with SMGC's interpretation of the 2012 JORC Code published by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy. Under the report guidelines all geological and other relevant factors for this deposit are considered in sufficient detail to serve as a guide to its development.

The Coal Reserve Estimate was prepared with the strategic objective of maximizing the tonnage for SDJ Project. This was prepared in compliance with SMGC's interpretation of the 2012 JORC Code published by the Joint Ore Reserves Committee ("JORC") of the Australasian Institute of Mining and Metallurgy. The following approach was followed by SMGC to estimate Coal Reserves for this scenario:

1. Physical surface constraints were studied and consideration was made for surface water runoff and management, as well as the location of significant infrastructure and communities inside the potential mining area. Appropriate mining limits were then determined based on this data.
2. Pit optimisation software using the Lerchs Grossman algorithm was applied to the geological model inside the mining limits using appropriate overall pit slope angles. A range of sales prices was used to determine the relationship between coal tonnes and stripping ratio. This produced a set of nested pit shells inside the mining limits.
3. The result of the Optimiser Pit shells were analysed and the largest possible pit shell was selected after leaving room for general access at the Southern part of the concession for the sake of practicality.
4. A final pit design was produced based on the selected pit shell by applying appropriate geotechnical parameters and taking into account practical mining considerations.
5. Minex software was used to generate a 'Reserves database' for all Resources inside the final pit design. Appropriate mining loss, dilution factors and density adjustments were applied and Run of Mine (ROM) quantities and qualities were reported.
6. An execution level of mine plan was developed including a production schedule, equipment requirement, water management, waste balance and estimated waste haul distances.
7. The operating cost was then calculated based on the mine plan using reasonable cost inputs. Capital costs were also estimated based on SMGC's experience in that area as well as data provided by SDJ and a financial model developed for the project to confirm that the project is viable given the assumptions of the study.
8. Recoverable Coal Reserves inside the final pit design were then classified as Proved or Probable based on the boundaries for Measured and Indicated Coal Resources provided in the Statement of Coal Resources.

2.1 SCOPE

The scope of the report is to prepare an Independent Qualified Persons Report (QPR) for the SDJ coal concession in compliance with the JORC Code. The QPR applies to the concession itself and not the holding company, and thus the following factors were not accounted for:

- Existing assets and liabilities of the holding company;
- Aspects relating to financing for the mine and infrastructure; and
- Any legal issues affecting the holding company and not directly related to the validity of the tenement itself.

While estimation of operating costs, capital costs and other economic considerations are included in the scope of work; this report is not a valuation report and does not include an opinion of the value of the concession.

2.2 RESULTS LIMITATIONS AND STANDARDS

It is important to note when considering this report that geological information usually consists of a series of small points of data on a large blank canvas. The true nature of any body of mineralisation is never known until the last tonne of ore has been mined out, by which time exploration has long since ceased. Exploration information relies on interpretation of a relatively small statistical sample of the deposit being studied; thus a variety of interpretations may be possible from the fragmentary data available. Investors should note that the statements and diagrams in this report are based on the best information available at the time, but may not necessarily be absolutely correct. Such statements and diagrams are subject to change or refinement as new exploration makes new data available, or new research alters prevailing geological concepts. Appraisal of all the information mentioned above forms the basis for this report. The views and conclusions expressed are solely those of SMGC. When conclusions and interpretations credited specifically to other parties are discussed within the report, then these are not necessarily the views of SMGC.

2.3 STATEMENT OF INDEPENDENCE

This report was prepared on behalf of SMGC by the signatory to this report, assisted by the subject specialists whose qualifications and experience are set out in Appendix B of this report.

PT SMG Consultants started business in Australia in the 1960's as a global geological and mining software development. PT SMG Consultants was founded in Indonesia in July 2009 as a base to serve its client base across South East Asia. PT SMG Consultants, headquartered in Jakarta, is an independent mining consulting group providing geological, resource evaluation, mining engineering, Life of Mine Planning, JORC Statements, KCMI Statements, VALMIN Reports and mine valuation services to the resources, power, investment and financial services industries.

SMGC works across the following minerals: Thermal Coal, Metallurgical Coal, Nickel, Gold, Manganese, Bauxite, Iron Ore and many other bulk commodities and base metals.

SMGC has been paid professional fees by Geo Energy Resources Limited (GERL) for the preparation of this report. The fees paid were not dependent in any way on the outcome of the technical assessment.

SMGC is independent from Geo Energy Resources Limited (GERL). No SMGC staff or specialists who contributed to this report have any interest or entitlement, direct or indirect, in the Company, the mining assets under review, or the outcome of this report.

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16 February 2016



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3. PROPERTY DESCRIPTION

3.1 PROJECT LOCATION

The SDJ Project Area is located in the Angsana and Sungai Lohan sub district, Tanah Bumbu regency, South Kalimantan Province of Indonesia and covers an area of 235.5 ha (Figure 3.1). The concession is situated 185 km due Southeast of Banjarmasin the Capital Province of South Kalimantan.

Access to the concession area is by an approximately 2 hour domestic flight from Jakarta to Banjarmasin followed by 3 hour trip by car from Banjarmasin to Tanah Bumbu along tarred regional roads. The Project Area is approximately 30 minutes by car from Tanah Bumbu via a regional tarred road and then palm plant haul road.

3.2 PROJECT OWNERSHIP AND STATUS

Tenure for the SDJ Project is held under an Izin Usaha Pertambangan (IUP) Operasi Produksi which gives SDJ rights to mine and produce coal. SMGC has been provided with a copy of the IUP documents for the concession. The details of this concession are shown in Table 3.1 and all Reserves reported in this statement are contained within this concession.

Table 3.1 – Concession Details

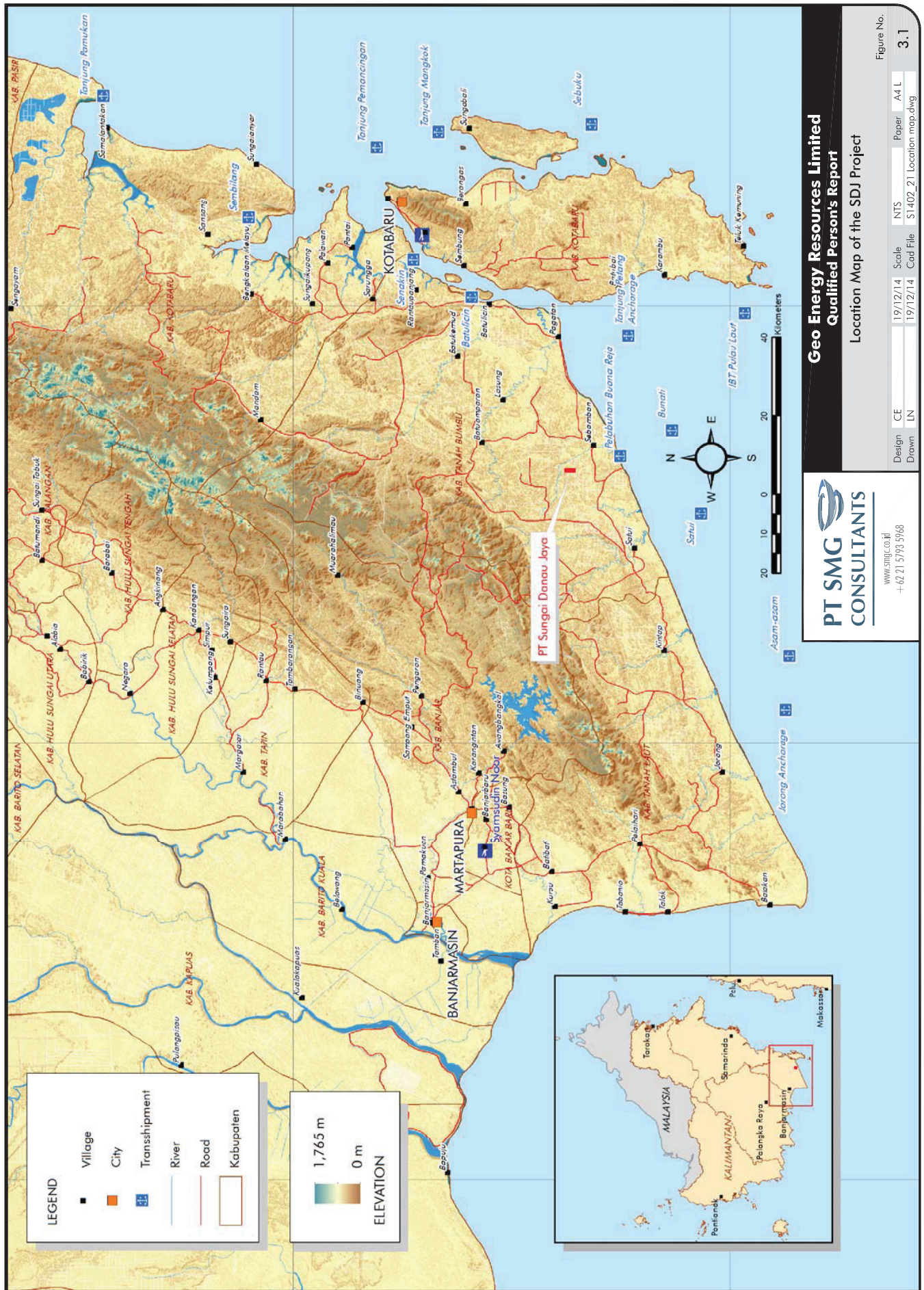
IUP	PT Sungai Danau Jaya
Type	IUP Operasi Produksi
Number	N0. 188.45/311/distamben/2014
Company Name	PT Sungai Danau Jaya (SDJ)
Kabupaten	Tanah Bumbu
Province	South Kalimantan
Resource	Coal
Area	235.5 ha
Date Signed	17 Juni 2014
Expiry	29 Mei 2022
Nett Attributable to GERL	100 Percent

SMGC makes no warranty or representation to either SDJ or third parties (express or implied) in regard to the validity of the IUP and documentation. This Reserve Report does not constitute a legal due diligence of the concession.

The Southern area of the SDJ concession is classified as Areal Penggunaan Lain (Other Purpose) and thus a "Borrow to Use" Permit (Izin Pinjam Pakai Kawasan Hutan) is not required, but the Northern area is classified as Hutan Produksi Konversi (convertible production forest) and a "Borrow to Use" Permit (Izin Pinjam Pakai Kawasan Hutan) is required from the Forestry Department before mining operations can take place. SDJ holds a valid IPPKH through 29 May 2022 for a limited area (68.90 Ha) including the mine, haul road and other infrastructure.

SMGC reviewed the AMDAL documents and the environmental procedures for the site. It is noted that no environmental incident reporting or environmental performance statistics were available at the time of the site visits as it is not yet operational. SMGC strongly recommends that an environmental incident reporting and management system is implemented as a priority for the site.

The clean and clear (C&C) certificate (No. 467/Bb/03/2014) was issued on 31 December 2014 by Directorate General of Mineral and Coal. SMGC has been given a copy of the certificate. This certificate appears under Ministry of Energy and Mineral Resources (MEMR) WebGIS.



4. GEOLOGICAL SETTING

4.1 REGIONAL GEOLOGY

The SDJ Project Area is located in the Southern part of the Barito Basin. The Barito Basin commenced its development in the late Cretaceous, following a micro-continental collision between the Paternoster and SW Borneo micro-continents (Metcalf, 1996; Satyana, 1996). Early Tertiary extensional deformation occurred as a tectonic consequence of that oblique convergence. This produced a series of Northwest – Southeast trending rifts. These rifts became accommodation space for alluvial fan and lacustrine sediments of the Lower Tanjung Formation, derived from horst areas. In the earliest middle Eocene as the result of a marine transgression the rift sediments becoming more fluviodeltaic and eventually marine, as transgression proceeded during the deposition of the middle Tanjung Formation. The marine transgression subsequently submerged the rifts in late Eocene – earliest Oligocene time, resulting in the deposition of widespread marine shales of the Upper Tanjung Formation. After a short-lived marine regression in the middle Oligocene the development of a sag basin caused renewed marine transgression. The late Oligocene is characterised by the deposition of platform carbonates of the Berau Formation. Carbonate deposition continued into the early Miocene, when it was terminated by increasing clastic input from the West. During the Miocene the sea regressed, due to the uplift of the Schwaner Core and the Meratus Mountains. Clastic input resulted in the deposition of the Eastwards-prograding deltaic sediments of the Warukin Formation. In the late Miocene the Meratus Mountains re-emerged, followed by the isostatic subsidence of the basin which was situated in a foreland position in relation to the rising mountains. Sediments shed from this uplift were deposited in the subsiding basin, resulting in the deposition of thousands of meters of the Warukin Formation. The uplift of the Meratus Mountains continued into the Pleistocene and resulted in the deposition of the molassic-deltaic sediments of the Pliocene Dahor Formation.

The Dahor Formation is the coal bearing formation. This formation consists of quartz sandstone, friable, locally with intercalations of clay, lignite, limonite, smoky-quartz and basalt gravels.

4.2 LOCAL GEOLOGY

The main coal bearing lithology within the SDJ concession is the Dahor Formation. Coal in this formation shows single phase of seam splitting. 9 named parent coal seams have been intersected by exploration drilling within the SDJ area. Of these 9 seams, the A5A, A5B, A5C, and A5D seams have split into an upper and lower member. In total 13 named seam plies have been identified and to be included in the structural geological model, as shown in Table 4.1.

Coal seams strikes in a roughly Southeasterly direction and dip to the Southwest. Seam dips are relatively gentle with a maximum recorded dip of 15°.

The total seam thickness summary of the raw borehole input values is located in Table 4.2.

Table 4.1 – SDJ Local Seam Split Sequence

SEAM	SPLITS	PROPORTION
A5D	A5D2	39.6 %
	A5D1	60.4 %
A5C	A5C2	71.7 %
	A5C1	28.3 %
A5B	A5B2	24.4 %
	A5B1	75.6 %
A5A	A5A2	64.3 %
	A5A1	35.7 %

Table 4.2 – SDJ Seam Thickness Summary

SEAM	THICKNESS		MEAN m	NUMBER OF INTERSECTIONS
	MIN m	MAX m		
A5D2	0.5	5.1	2.3	74
A5D1	0.8	7.0	3.5	75
A5C2	0.3	4.2	1.8	50
A5C1	0.1	1.8	0.7	50
A5B2	0.4	5.7	3.0	80
A5B1	4.6	16.4	9.4	79
A5A2	0.3	2.7	0.8	39
A5A1	0.2	1.5	0.4	39
A3	0.7	1.4	0.9	10
A2	0.3	0.7	0.5	6
A1	0.2	0.8	0.5	3
A0	0.7	1.0	0.9	3
A	5.9	6.4	6.1	3

5. EXPLORATION DATA USED FOR COAL RESOURCE ESTIMATION

5.1 EXPLORATION HISTORY

There have been a number of phases of exploration completed in the SDJ area in the past 5 years. The first phase, in 2010 a limited coal outcrop mapping programme and shallow drilling programme was undertaken across a portion of the SDJ concession area. A second stage exploration programme then continued from December 2013 until March 2014. This stage included further coal outcrop mapping, and 200 m spaced borehole drilling with typically shallow drill depths and no coal quality analysis over a greater percentage of the SDJ Area. A total of 64 boreholes were drilled during this stage.

The favourable results obtained from these previous exploration programmes, led to a more extensive and systematic, exploration programme being conducted during the period of April 2014 to June 2014. The programme was implemented and managed by SDJ. The exploration activities included detailed drilling, down-hole geophysical logging, coal quality analysis and topographic surveying. All exploration data from the latest programme has been considered for modelling and Resource estimation purposes on December 2014.

5.2 DRILLING

The most recent drilling programme was carried out using hydraulic drill rigs contracted from PT Prima Energytama. The rigs used were 3 Jacro 175 NMLC units and 5 Jacro 350 units which are capable of HQ3 coring up to 120 m in depth. All boreholes were collared vertically.

All drills were manned by fully qualified geologists and logging was completed in the drill splits before being removed to core trays. Core was also checked for recovery. For open holes, chip samples were collected at 0.5 m intervals for logging. Photographing of core in the splits and trays was routinely carried out. All boreholes have been geophysically logged at the completion of drilling and sections checked to ensure coal seams have been recovered as required. If recovery was found to be less than 90% within the coal seams, the hole was re-drilled to collect a sample with greater than 90 % recovery.

Validated collar surveys, lithology data and geophysical logs were required as a minimum for a borehole to be used in the modelling process. A total of 130 boreholes have been completed in the Project Area. 103 of 130 boreholes are used to estimate the resources in SDJ area. 27 boreholes have been excluded as they fall outside the SDJ concession area and show no correlation with the seams identified in SDJ. A total of 103 validated boreholes have been included in the SDJ Structural Geological Model. A total of 22 of these validated boreholes have sufficient coal quality analyses to act as significant Points of Observation for the JORC Resource estimations. A valid point has been defined as a seam intersection that is surveyed and cored, where quality analysis has been acquired, sample recovery is $\geq 90\%$ and the hole is accompanied by valid survey and geophysics.

- Total number of boreholes drilled 130
- Boreholes with valid collar survey's recorded using total station survey equipment 103
- Boreholes with geophysical logs 130
- Total number of valid boreholes included in the Structural Geological Model 103
- Total Number of Points of Observation for the JORC Resource estimations is 22

5.3 SURVEY DATA

There are four surveyed benchmarks in the SDJ Project Area that were installed by the SDJ internal survey team. The points are used as a reference for all topographic survey work. The SDJ reference coordinates are reported in the WGS 84 projection system.

Borehole collars to date have been surveyed using standard total station techniques employed by the SDJ internal survey team during the course of successive drilling campaigns. Surveys have been validated by SDJ staff. The surveyed borehole locations generally match well with the topographic data provided. Where there is a discrepancy the surveyed borehole collar elevations have been considered most accurate and used for modelling purposes.

The topography used in the current SDJ Geological Model is original topography that has been derived from total station survey data. The topography was generated by SDJ survey team across the Project Area in June, 2014. There is no mining activity in the Project Area. The topographic surface used for all Resource estimation techniques is current up to the 31 December 2014.

5.4 SAMPLING

Sampling has been carried out on a ply by ply basis. Sampling of the coal seams and other material followed the standard sampling procedure and is described as follows:

- Open core barrel inner split tube and remove sample from the barrel
- Transfer the core to the PVC split or core box
- Determine the core depth ("From" and "To") from the drill depth
- Reconstruct the core in the split to allow for any gaps
- Determine the core recovery
- Wash down using water and a cloth and/or brush prior to logging if covered by mud or oil
- Complete geological logging and take requisite photographs. Only need photographs of structure or any abnormal features. The photograph should show information of borehole ID, From, To, and Depth
- Follow the division of sample scheme of sampling all coal, sample separately any contained bands and take 10 cm of coal roof and floor samples
- Double the plastic bag to minimise moisture loss. Inserting one bag in another so that they are doubled
- Label the sample by ID card, the label should give information about the Sample Number, Hole Number, From/To depth, and Project Code. Placing the label ID card inside the small re-sealable plastic bag before putting it into the sample bag
- Seal the sample bag with tape and write the sample number; on the plastic bag
- Dispatch sample to accredited laboratory

The current sampling technique is considered sufficient to represent that part of the deposit that has been sampled. All correlations have been made to ensure that sample intervals match seam intervals and that these intervals are in agreement with down-hole geophysical logs.

5.5 QUALITY ASSURANCE/QUALITY CONTROL

Quality Assurance ("QA") concerns the establishment of measurement systems and procedures to provide adequate confidence that quality is adhered to. Quality Control ("QC") is one aspect of QA and refers to the use of control checks of the measurements to ensure the systems are working as planned.

Basic QA/QC checks were undertaken on the raw quality samples as they were received to insure consistency. Any outliers were immediately noted and duplicate tests were requested to validate the sample. The initial test of validating that all coal samples had 100% Proximate Analysis and that TM was greater than IM was completed on all samples. After that a comparison of Ash vs. CV on a dry basis (db) was generated to remove any moisture variations (e.g. weathering) following which samples were compared on an Ash vs. Relative Density and Total Moisture vs Drying Loss basis to check for outlying data. Results for both CV and Ash vs Density typically fall within 2 standard deviations and can be considered valid for estimation purposes.

5.6 DOWN-HOLE GEOPHYSICS

Down-hole geophysical logs were completed during both drilling programmes by PT Reccalog Geoprima. Geophysical logging provides information on the coal seams intersected and helps better define horizon boundaries and marker horizons used to correlate the subsurface geology. The presence or absence of geophysical logging is one of the criteria used in the determination of whether or not the borehole is valid as a point of observation for Resource calculations.

Logging was performed on the all of boreholes (including cored and open holes) and all of boreholes have geophysical data. Seam picks and lithologies have all been corrected for geophysics.

The logging equipment used by the logging contractors includes the following:

- Digital Logging System
- Probe: Dual Density Gamma/Calliper
- Winch: Motorised 4 conductor winch system
- Portable generator, laptop computer, printer and spares

Under normal conditions, coal-bearing sections for each borehole are logged at the completion of drilling. On some occasions, poor ground conditions have led to collapsed borehole sections restricting the ability to log the entire hole upon completion in the usual manner. In these cases collapsed portions have been re-drilled, with density and gamma logging then being accomplished by lowering the geophysical probe through the drill string. Measurements are then taken by pulling the drill string up slightly so that the hole remains stable but the probe is sufficiently exposed to take acceptable readings of the rock mass.

After the completion of logging, logs were compiled and plotted in Acrobat pdf format and digital data has been stored as LAS files.

Data is backed up on site and a copy is kept off site at the operations office in Jakarta. In total 130 open and core holes have been geophysically logged. A review of the lithological seam picks showed that these matched the geophysical logs indicating that the depth corrections of the original lithology logs have been done correctly. This data was used for validation and verification of the coal seam correlations made by SMGC.

6. DEPOSIT CHARACTERISATION AND MINING METHOD

6.1 DEPOSIT CHARACTERISATION

The SDJ mining areas are characterised by the following features:

- A small number of coal seams
- Very thick parent coal seams (5 to 10 m)
- Thick interburden
- Shallow dips, average 5°

6.1.1 Waste Horizons

The in-seam interburden thickness in this deposit largely falls under the thick category (>10 m in thickness). This implies that most of the waste material can be mined using medium to large sized excavators (100 to 200 t).

6.1.2 Coal Structure

81 % of the total mineable coal tonnes are coming from seams which are greater than 3 m in thickness. This indicates the possibility of high recovery of coal during mining and of being able to use medium sized excavators for mining.

The majority (97 %) of the seams in this deposit show low dips (0 to 10 degrees). This will be beneficial in enabling simple coal mining practices and allowing waste to be dumped back in pit with minimal geotechnical concerns.

6.1.3 Coal Quality

There is a very little variation in the coal quality in the SDJ deposit both stratigraphically down the seam sequence and also spatially across the concession area. SDJ coal can be classified as Low sulphur, High Volatile Moderate Ash coal with Low Gross as Received Energy (GAR) content as:

- 89 % of coal tonnes come within a TS range of 0.1 % to 0.3 %
- 94 % of coal tonnes VM is greater than 39 %
- 81 % of coal tonnes come within an Ash range of 4 % to 7 %
- 89 % of coal tonnes GAR Energy come within a range of 3900 to 4300 Kcal/Kg

6.2 MINING METHOD

Based on the above observations on the different characterisations of the SDJ deposit it is assumed that a standard truck and excavator method will be the most appropriate. This method is well proven and a common practice in Indonesia.

Waste material will be mined using medium sized (100 to 200 t) hydraulic excavators and loaded into standard rear tipping off-highway trucks (up to 55 t) and hauled to dumps in close proximity to the pits or to in-pit dumps where possible.

Cleaning of coal will be done by small sized hydraulic excavators (40 t) with flat-bladed buckets. Minimum dilution and greater recovery is likely to be expected due to thick nature of the coal seams with low dip. This has been considered during the Reserve estimation process later in this report. Excavation of coal will be done using small hydraulic excavator of 40 t class with standard coal buckets and loaded into 30 t dump trucks.

7. RESOURCE AND RESERVE ESTIMATES AND EXPLORATION RESULTS

This section discusses the Resources, Reserves and exploration results for SDJ coal concession. Resources and Reserves are presented in the format prescribed in “Appendix 7D of the SGX Catalyst rules” in Appendix C.

7.1 COAL RESOURCE

7.1.1 Interpretation

The SDJ Geological Model created by SMGC is interpreted as being geologically competent and considered to accurately represent the SDJ deposit. Coal seams strike in a roughly South-easterly direction and dip to the Southwest. Seam dips are relatively gentle typically ranging from 1 to 5 degrees.

7.1.2 Database Integrity

To perform a complete review of the geological database and ensure that data meets the relevant standards for use in a JORC Resource Estimate, certain criteria must be met. To be considered to meet the standards for JORC code reporting requirements, a Resource must have a sufficient number of valid points of observation, and these points must be suitably spaced in order to accurately represent the deposit being modelled. Seam continuity and seam characteristics must be understood to allow confirmation of the Resource. Points of observation can be seam outcrops, exploration trenches or boreholes.

The database is considered by SMGC to be of an acceptable standard to report a JORC Resource. All seam picks have been checked and correlated.

7.1.3 Resource Dimensions

Drilling to date has identified a multi-seam coal Resource approximately 2.5 km long and 1.0 km wide within the SDJ concession. The geometry of this deposit is limited by the geological model extent to the North, South, East and West.

7.1.4 Moisture Basis

The average inherent moisture of the SDJ deposit is 14.1 % however Inherent Moisture results vary stratigraphically through the deposit. The Resource is reported on an air dried moisture basis. No moisture corrections have been made.

7.1.5 Cut-off Parameters

The Resource was limited to a 125 m depth cut-off. This cut-off has been used as the boreholes in the model have predominantly been drilled to a maximum depth of 125 m. A minimum thickness cut-off 0.30 metres was set for the area, as it is considered unlikely than any seam thinner than this would be extracted during future mining.

7.1.6 Resource Classification

A division of the Resources into Measured, Indicated and Inferred status was undertaken for both models.

The following Resource dimensions were used:

- Measured – 250 m radius circular polygon around points of observation
- Indicated – between 250-500 m radius circular polygon around points of observation
- Inferred – between 500-1,000 m radius circular polygons around points of observation

Resource classifications for both models in the SDJ Project Area were defined using the following criteria:

- Only boreholes that had valid survey collars (not GPS-survey) were used, i.e. those boreholes not surveyed have not been considered.
- Cored boreholes that were geophysically logged and sampled were considered as valid points of observation for Resource calculations.
- Non-logged holes were considered in structural modelling if coal seam thickness demonstrated valid thickness and recovery with adjacent geophysically logged boreholes.
- Open holes, intersecting coals seams with geophysical logs were also used to ensure continuity of the Resource calculation along the strike length of the deposit.
- No default density was applied to Resource calculations as sufficient measurements exist

7.1.7 Coal Resource Tabulation

The Coal Resource estimate, as at 31 December 2015, for the SDJ Project Area is reported in Table 7.1. This has been classified and reported in accordance with the guidelines of the JORC Code 2012. A total Resource of 58.4 Million tonnes (Mt) was derived from the SDJ Geological Model. This was calculated by SMGC using Minex Modelling and Resource estimation tools and is comprised of 42.1 Mt of Measured Category Resources, 14.1 Mt of Indicated Category Resources and 2.2 Mt of Inferred Category Resources.

Resources reported are based upon relative density grids that have been derived from the PT Geoservices Laboratory data. It is to be noted that the Resource was based on extrapolated relative densities from the data supplied by SDJ. The Resource was limited to the depth of 125 m below topography.

Table 7.1 – Total Resource Tonnage by Seam

SEAM	RESOURCES			BY SEAM (Mt)
	MEASURED (Mt)	INDICATED (Mt)	INFERRED (Mt)	
A5D2	4.9	0.3		5.2
A5D1	7.2	1.4		8.6
A5C2	0.8	1.6	0.4	2.9
A5C1		0.5	0.4	0.9
A5B2	7.1	2.0	0.3	9.3
A5B1	22.0	6.0	1.0	29.0
A5A2		1.6	0.1	1.7
A5A1		0.7		0.7
TOTAL	42.1	14.1	2.2	58.4

**This table must be presented with the entire JORC Resource Statement from which it was obtained.*

**All values are rounded to the nearest million tonnes.*

**Tonnes reported on a laboratory analysed adb basis*

7.1.8 Comparison with Previous Estimates

A maiden Resource estimate for the concession was previously stated by SMGC in December 2014. There have been no further exploration or mining activities within the concession area since this date. As such, there is no material change between this Resource estimate and that calculated and stated by SMGC in their report titled "JORC Resource Statement, PT Sungai Danau Jaya, Dated December 2014".

7.2 COAL RESERVE ESTIMATION

The Statement of Coal Reserves has been prepared in accordance with SMGC's interpretation of the 2012 Edition of the JORC Code. Coal Reserves have classified into Proved and Probable categories to reflect the reliability of the estimate. No Inferred Coal Resources are included in the reported Coal Reserves. Coal Reserve estimates is based on an execution level life of mine plan.

A summary of coal Reserves is shown under Table 7.2. The Reserves are stated as of 31 December 2015.

Table 7.2 – Marketable Coal Reserves as of 31 December 2015

Seam	Total Waste (Mbcm)	Total Coal (Mt)	RD adb (t/m3)	TS adb (%)	VM adb (%)	IM arb (%)	TM arb (%)	Ash adb (%)	CV arb (Kcal/Kg)	Proved Coal (Mt)	Probable Coal (Mt)	Proved + Probable Coal (Mt)
A5D2	78.3	8.7	1.25	0.13	42.5	14.2	36.5	5.1	4,022	8.4	0.2	8.6
A5D1	1.8	2.0	1.27	0.13	42.1	14.4	36.7	6.0	3,978	1.4	0.6	2.0
A5C2	46.1	2.4	1.25	0.28	42.3	13.9	37.3	8.2	3,865	0.9	1.1	2.0
A5C1	0.7	0.3	1.30	0.52	41.1	14.3	35.9	13.5	3,657	0.0	0.1	0.1
A5B2	27.7	21.7	1.25	0.22	41.6	14.6	36.4	5.1	4,060	18.2	3.5	21.7
A5B1	1.2	6.2	1.26	0.15	40.3	16.3	35.2	4.8	4,132	4.6	1.6	6.1
A5A2	1.8	1.8	1.26	0.16	43.3	13.8	35.9	9.8	3,862	0.0	1.7	1.7
A5A1	1.0	0.2	1.30	0.17	40.1	13.9	36.6	16.7	3,407	0.0	0.2	0.2
Total	158.6	43.2	1.25	0.19	41.7	14.7	36.3	5.6	4,036	33.4	9.0	42.4

**This table must be presented with the entire JORC Reserve Statement from which it was obtained.*

**All values are rounded to the nearest million tonnes.*

7.2.1 Comparison with Previous Estimates

An earlier estimate of Reserves was undertaken by SMGC and was dated 31 December 2014. The previous Reserve estimate is shown in comparison to this estimate in Table 7.3.

Table 7.3 – Comparison to Previous Reserve Estimate

Description	Proved (Mt)	Probable (Mt)	Proved and Probable (Mt)
Estimate 31 December 2014	33.4	9.0	42.4
Estimate 31 December 2015	33.4	9.0	42.4
Difference	0.0	0.0	0.0

As explained under Section 10 of this report, the two major changes that occurred since the last Reserve Estimate in December 2014 have had no material impact on the total Reserve base of this project. Therefore the current December 2015 estimate of Reserve is exactly same as that in December 2014 as no mining has taken place.

7.3 STATEMENT OF COAL RESOURCES AND COAL RESERVES

The combined coal Reserve estimate for SDJ Project has been calculated and is shown in Table 7.4, accompanied by the corresponding coal Resource tabulation.

Table 7.4 – Combined Coal Reserves and Resources as at 31 December 2015

Category	Coal Tonnes (Mt)	Changes from previous Estimate (%)
RESERVES		
Proved	33.4	0.0
Probable	9.0	0.0
Total	42.4	0.0
RESOURCES		
Measured	42.1	0.0
Indicated	14.1	0.0
Inferred	2.2	0.0
Total	58.4	0.0

**This table must be presented with the entire JORC Resource and Reserve Statements from which it was obtained.*

**All values are rounded to the nearest million tonnes.*

8. COAL LOGISTICS AND INFRASTRUCTURE

8.1 COAL LOGISTICS

It is proposed that coal will be cleaned and mined using small excavators (40 t) and hauled using rigid body off-highway trucks (30 t) directly to a ROM stockpile located at the port at a distance of about 17.5 Km from the mine. The coal trucks will use the mine haul roads from the pit to the TMA Haul Road. All the coal trucks will be weighed through a 50 t weigh-bridge before entering the ROM stockpile. Coal dumped to the ROM stockpile will be rehandled into feeder hoppers by a fleet of wheel loaders and dump trucks depending on the barge allocation schedule. The coal from the hopper will be crushed to –50 mm product through primary and secondary crusher systems and finally loaded into 300 ft. (8000 t) barges through bulk loading conveyors (BLC).

8.2 INFRASTRUCTURE

Operations have not commenced within the SDJ concession and there is no significant infrastructure on the site. SDJ is in a process of discussion with number of parties for Infrastructure development on site and at the port area. SDJ has received quotes for constructing the barge loading facilities at the port from a local contractor. SMGC has reviewed the documents provided by SDJ and prepared a preliminary infrastructure study to support this report. The study includes designing the infrastructure layout and estimating the capital cost for infrastructure construction.

The infrastructure that will be required to allow the production targets to be reached is described below:

8.2.1 Mine Site Infrastructure

- a. Camp Road: required to connect the accommodation and mess area to the TMA road at the East. This will be done by widening an existing plantation road which runs along the IUP boundary from West to East. This road is proposed to follow the existing plantation road gradient and therefore no cut-fill has been considered for this purpose.
- b. Coal Haulage Road: required between the mining pit and existing TMA road at the East. A combination of existing plantation roads have been identified for this purpose. These roads will be mainly widened for the purpose of coal hauling. SMGC has completed a preliminary haul road design and used as the basis for capital cost estimates. The road was designed with a maximum gradient of 8 % and a width of 25 m.
- c. Office, Accommodation and Mess: will be required to house SDJ and contractor employees on the site. The facilities for SDJ are not expected to be large and will consist of accommodation, messing and recreation facilities, an office and meeting rooms, first aid room and security infrastructure.
- d. Workshop and Warehouse: required by SDJ and its contractors for maintenance of heavy equipment and other equipment on the site. The workshop will be supported by suitable warehouse facilities.
- e. Utilities and Communications: including fuel storage and distribution system, fire protection, radio communications and information technology.
- f. Electrical Supply and Distribution: this includes appropriate diesel generators and the control and distribution systems for distribution of electrical power across the site.

8.2.2 Port and Barge Loading Facilities

SDJ is in a discussion with a local company for constructing 2,000 tph (2 X 1,000 tph) crushing and barge loading facility at its own port area at South on Sebamban River. This facility will include four lines in parallel each consisting of a combination of the following in series:

- a. Feeder Hopper,
- b. Primary Crusher
- c. Secondary Crusher
- d. Bulk Loading Conveyor

SDJ has obtained preliminary quotes from the supplier for an indication of capital requirement for the above construction.

As per the received quote the construction will take approximately 6 months to complete from the date of awarding the contract. In SMGC's opinion it generally requires three to four months for negotiations between companies before such work can be awarded. This implies that in all practical possibilities the facility will not be operational in the Year 2015. Therefore it was decided that SDJ will use a neighbouring BIR port and associated stockpile during 2015 for carrying out the shipment activities. SDJ has provided the following basic fee structure to SMGC for using the facility of the BIR port. SDJ is still under discussion with BIR port authorities to secure a contract prior to shipment.

9. FINANCIAL ANALYSIS

9.1 LIFE OF MINE PRODUCTION SCHEDULE

A Life of Mine (LOM) plan was completed for the deposit based on the final pit design. The LOM plan included a production schedule, waste balance and preliminary equipment calculations. This is considered to have been undertaken to an execution level of detail and was done to ensure that the mining operation is practical, achievable and that there is sufficient dumping room to contain all the waste mined in the final pit design. Waste haul distances were also estimated to project the waste mining costs for the operation.

The mine plan targeted 1.2 Mt in first year and average 3.0 Mt for rest of the mine life. The physical quantities of waste and coal and product qualities for the life of mine from the production schedule are shown in Table 9.1.

It is expected that improvements can be made to this base case mine plan and production schedule with more detailed planning. Detailed technical assessment is currently being made to ramp up production to 5 Mtpa with a waste capacity of 18 Mbcm in order to maximise the value of the asset by reducing the mine life. This work is under progress at the time of preparation of this report. A tentative production schedule for this ramp up scenario can be seen under Table 9.2. The reader must be aware that the final result of this assessment may vary from what is shown under this table.

Table 9.1 – Life of Mine Schedule

Description	Units	Total	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
In-situ Waste (Incl. Topsoil)	kbcm	158,243	6,400	9,600	9,600	9,600	9,191	10,379	11,000	10,698	11,000	12,496	13,000	13,000	12,910	13,000	6,369
Rehanded Waste	kbcm	4,747	192	288	288	288	276	311	330	321	330	375	390	390	387	390	191
Total Waste	kbcm	162,990	6,592	9,888	9,888	9,888	9,467	10,690	11,330	11,019	11,330	12,871	13,390	13,390	13,297	13,390	6,560
ROM Coal Exposed	ktonne	43,040	1,270	2,819	2,873	2,851	3,141	3,141	2,569	3,141	2,812	3,141	3,025	3,086	3,141	2,552	3,477
Strip Ratio	bcm : tonne	3.7	5.0	3.4	3.3	3.4	2.9	3.3	4.3	3.4	3.9	4.0	4.3	4.2	4.1	5.1	1.8
Proved + Probable	ktonne	41,889	1,240	2,460	2,846	2,772	2,958	3,055	2,527	3,106	2,767	3,104	2,968	3,040	3,110	2,524	3,412
Proportion of Proved + Probable	%	97	98	87	99	97	94	97	98	99	98	99	98	99	99	99	98
Proportion of Other Coal	%	3	2	13	1	3	6	3	2	1	2	1	2	2	1	1	2
Waste Haul Distance	Km	2.8	2.0	2.0	2.1	3.2	3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.8	2.6	2.5	2.4
RD	(t/m3)	1.37	1.40	1.39	1.38	1.36	1.36	1.35	1.35	1.35	1.36	1.37	1.37	1.38	1.38	1.38	1.38
Ash	(%)	4.5	3.6	3.8	3.9	4.2	4.5	4.6	4.7	4.4	4.6	4.6	4.9	4.9	4.7	4.9	4.6
Total Moisture	(%)	36.3	38.2	37.7	37.8	37.7	37.1	37.3	36.6	35.3	34.3	34.8	35.5	35.8	35.9	35.7	35.6
Total Sulphur	(%)	0.19	0.14	0.15	0.18	0.21	0.21	0.22	0.19	0.18	0.18	0.17	0.21	0.20	0.20	0.20	0.17
CV ADB	Kcal/Kg	5,482	5,648	5,648	5,620	5,590	5,534	5,513	5,487	5,423	5,328	5,314	5,356	5,382	5,466	5,499	5,534
CV GAR	Kcal/Kg	4,025	3,923	3,981	3,977	3,974	3,981	3,967	3,980	4,078	4,137	4,096	4,054	4,034	4,044	4,024	4,047

Table 9.2 – Ramp up Production Schedule (under progress)

Description	Units	Total	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
In-situ Waste (Incl. Topsoil)	kbcm	158,243	9,000	12,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	11,243
Rehandled Waste	kbcm	4,747	270	360	540	540	540	540	540	540	540	337
Total Waste	kbcm	162,990	9,270	12,360	18,540	18,540	18,540	18,540	18,540	18,540	18,540	11,580
ROM Coal Exposed	ktonne	43,040	1,961	3,779	5,271	5,478	4,927	4,638	4,342	4,116	4,171	4,356
Strip Ratio	bcm : tonne	3.7	4.6	3.2	3.4	3.3	3.7	3.9	4.1	4.4	4.3	2.6
Proved + Probable	ktonne	41,889	1,919	3,288	5,214	5,192	4,822	4,579	4,292	4,036	4,129	4,418
Proportion of Proved + Probable	%	97	98	87	99	95	98	99	99	98	99	98
Proportion of Other Coal	%	3	2	13	1	5	2	1	1	2	1	2
Waste Haul Distance	Km	2.8	2.0	2.1	3.2	3.2	3.1	3.1	3.0	3.0	2.8	2.5
RD	(t/m ³)	1.37	1.40	1.38	1.37	1.35	1.35	1.36	1.37	1.38	1.38	1.38
Ash	(%)	4.5	3.7	3.8	4.1	4.7	4.5	4.6	4.7	4.8	4.8	4.7
Total Moisture	(%)	36.3	38.0	37.9	37.4	37.3	35.9	34.5	35.2	35.9	35.7	35.7
Total Sulphur	(%)	0.19	0.14	0.17	0.19	0.23	0.19	0.18	0.19	0.19	0.21	0.17
CV ADB	Kcal/Kg	5,481	5,645	5,639	5,590	5,515	5,453	5,337	5,329	5,384	5,479	5,526
CV GAR	Kcal/Kg	4,025	3,948	3,981	3,983	3,966	4,030	4,129	4,073	4,019	4,052	4,037

9.2 MARKETING ASSESSMENT

SMGC contracted the independent company Resource Management International Pty Ltd (RMI) to undertake an assessment and estimate of long term coal prices for coal from the SDJ concession.

It is RMI's view that coal from the SDJ concession will compete in the lower CV spectrum of the thermal coal market and is well placed to meet demand in the Asia Pacific including the low ash markets of India and Malaysia. The Ecocoal brand with specifications of 4,200 kcal/kg, total moisture 35 %, total sulphur 0.2 % and ash of 3.9 % was used as a reference price for estimating a forward curve for coal price.

The nominal coal price forecasts for coal produced from the SDJ concession are shown in Table 9.3. RMI has estimated a forecast for a period of first 9 years of the project. SMGC has followed the trend and projected the forecast beyond 10 years to cover the life of the project. The table shows the coal price forecast from RMI for the period 2015-2023 and the projected forecast by SMGC for the period 2024-2029 along with the forecast production quality from the concession based on the life of mine plan.

Table 9.3 – Long Term Thermal Coal Price Forecasts

Period	GAR Energy (kcal/kg)	RMI Nominal Coal Price (USD/tonne)
2015	3,923	33.05
2016	3,980	39.25
2017	3,977	43.47
2018	3,974	47.21
2019	3,981	49.80
2020	3,967	50.70
2021	3,980	51.62
2022	4,076	52.48
2023	4,136	52.89
2024	4,097	53.92
2025	4,055	54.44
2026	4,034	55.24
2027	4,044	56.48
2028	4,024	57.33
2029	4,047	58.81

9.3 CAPITAL COSTS

Capital costs have been estimated based on coal logistics as described in earlier sections. The estimated capital costs are shown in Table 9.4.

Table 9.4 – Capital Costs (USD Millions in Real Terms)

Description	Amount (USD millions)
Mine Site Infrastructure	
Camp Area Preparation	0.5
Camp Road	0.5
Coal Haul Road	1.2
Office, Camp and Mess	1.4
Workshop and Warehouse	0.2
Utilities and Communications	0.3
EPCM, Indirect Cost and Taxes	1.8
Subtotal Mine Site Infrastructure	5.9
Contingency (25 %)	1.5
Total Mine Site Infrastructure	7.4
Other Capital Expenditure	
Port and Barge Loading Facility	6.8
Mine Closure	3.5
Land Compensation	5.0
Technical Studies & Permitting	1.0
Contractors Mob-Demob	0.9
Subtotal Other Capital Expenditure	17.2
Contingency (15 %)	2.6
Total Other Capital Expenditure	19.7
GRAND TOTAL	27.1

All capital costs are assumed to be incurred prior to production commencing unless otherwise noted. SMGC has used factored estimates for similar construction services on a turn-key basis. However, SDJ needs to do the required earth work and subgrade compaction before the construction can commence. The cost for the same has been included in the estimate. It has been further assumed that while much of this infrastructure will be constructed using contractors, SDJ will be required to pay for the construction of the infrastructure at the start of the mine life.

The IDR cost items were converted to USD using a long term Exchange rate of 11,000 IDR per USD.

Contractors Mob-Demob cost were estimated based on equipment mobilisation schedule following the Life of Mine plan complete by SMGC.

Mine closure costs were estimated at USD 7,000 per hectare for a total of 495 Ha, incurred in the last two years of the mine life.

In addition, an allowance of approximately USD 1.3 million per year has been included as ongoing sustaining capital expenditure for the operation.

9.4 OPERATING COSTS

A set of yearly unit rates were estimated by SMGC for the SDJ Project based on the Life of Mine Plan (LOM) document and existing contracts between SDJ and other parties. These were then compared against similar operations in Indonesia and are found reasonable and suitable for the purpose of this study. Estimated operating costs are shown in order of importance in Table 9.5 and Figure 9.1. The most significant costs in both scenarios are waste mining, barging and overheads.

9.4.1 Variable Unit Rates

The equipment and manpower requirement along with the physical quantities as described in the Life of Mine plan document were used to estimate the yearly unit rates for the following major categories:

- Waste Mining (Incl. Topsoil)
- Coal Mining and Haulage to Port
- Port Stockpile and Barge Loading
- Pit Support
- Site Overhead

The rates were mainly attributable to the following key components:

- Equipment Rental
- Fuel Consumption
- Salary and Wages
- Meals and Laundry

Equipment rental rates and Fuel consumptions are provided in the Equipment rental Agreement between SDJ and MRP as discussed in the Life of Mine document. Salary and Wages as well as Meals and Laundry expenses were standard assumptions based on discussion between SMGC and SDJ planning department.

9.4.2 Fixed Unit rates

The following Fees and Charges are payable to the various parties following the actual contracts. These rates are fixed through the entire life of mine.

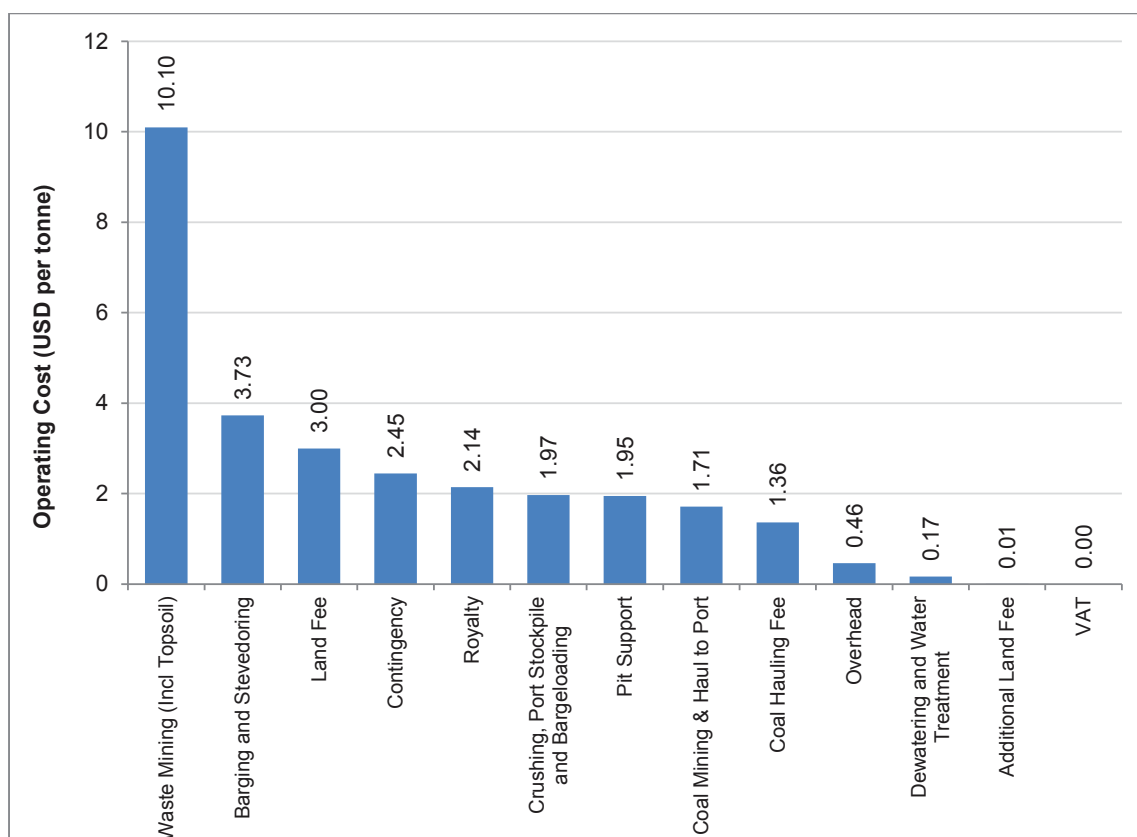
- Land Fee
- Coal Hauling Fee
- Barging and Stevedoring

9.4.3 Fixed Costs

Fixed costs are independent of production rates, although it is realistic that there will be some changes in these costs as the size of the operation changes. Dewatering and water treatment is considered to be fixed for the purpose of this study, as the volume of water treated and the size of settling ponds will not vary significantly with different production rates. Fixed cost estimates are based on typical costs in similar operations in Kalimantan

Table 9.5 – Estimated LOM Operating Costs

Items	Unit	Total	Proportion	Description
Waste Mining (Incl Topsoil)	USD / tonne	10.10	35%	Waste Mining cost
Barging and Stevedoring	USD / tonne	3.73	13%	Barging to MV
Land Fee	USD / tonne	3.00	10%	Land Usage Fee for Coal price < USD 45
Contingency	USD / tonne	2.45	8%	Standard contingency
Royalty	USD / tonne	2.14	7%	Paid to the Government
Crushing, Port Stockpile and Barge Loading	USD / tonne	1.97	7%	Port Handling and Barge Loading
Pit Support	USD / tonne	1.95	7%	All Pit support Equipment Cost
Coal Mining & Haul to Port	USD / tonne	1.71	6%	Coal Mining and Hauling Cost
Coal Hauling Fee	USD / tonne	1.36	5%	Fee for TMA hauling road & BBU underpass road
Overhead	USD / tonne	0.46	2%	Site office personnel
Dewatering and Water Treatment	USD / tonne	0.17	1%	Fixed Water Management cost
Additional Land Fee	USD / tonne	0.01	0%	Land Usage Fee for Coal price > USD 45
VAT	USD / tonne	-	0%	Standard VAT
TOTAL OPERATION COSTS	USD / tonne	29.05		

Figure 9.1 – Pareto of Operating Costs (USD per tonne)

10. 2015 UPDATE

There are two major areas of the project where some changes have occurred since the last Reserve Statement in December 2014.

Changes in Mine Planning

SDJ has signed a new contract mining agreement with BUMA which has increased the total yearly mining capacities. SDJ has revised their mine plan based on these new capacities following the same mining strategy outlined in the last Life of Mine document prepared in December 2014. This revised mine plan only ensures a better production ramp up schedule. This does not have any material impact on the previous Reserve Estimate.

Changes in Coal Price Forecast

A reassessment of the long-term thermal coal prices for SDJ coal was essential to assess the impact of the coal price on economic viability of the project as the sea-borne thermal coal market has suffered significantly due to a sharp decline in prices in the past 12 months. Therefore a revised price forecast for this coal was carried out by the independent company Resource Management International Pty Ltd (RMI). SMGC has applied these new coal prices in the December 2014 financial model and observed that the project remains robust economically throughout its mine life. Therefore in SMGC's opinion this reduction in coal prices does not have any material impact on the project economics and hence it does not change the outcome of the previous Reserve Estimate.

11. INTERPRETATION AND CONCLUSIONS

The Geology of the SDJ Project Area is reasonably well understood. The deposit is considered to be a structurally simple with shallow dips and small number of thick parent coal seams with very little variability in quality.

The SDJ coal is classified as low sulphur, high volatile with low gross as received energy (GAR) and moderate ash content. An independent coal price forecast prepared by a third party expert shows that this coal will compete in the lower CV spectrum of the thermal coal market and is well placed to meet demand in the Asia Pacific including the low ash markets of India and Malaysia. The price estimated for this coal is expected to fall at an average 4.4% discount to the Eco Coal brand however it will be greater in the early years and then reduce as coal quality improves over the later years.

However, the geospatial location of the project provides a very favourable logistics framework along with a shared infrastructure base which in turn reflects to a low cash cost and capex requirement. The operating cost is further reduced under the owner operating mode as SDJ is to perform all the activities starting from mining up to barge loading with its own personnel and hired equipment. The life of mine plan was done to an execution level of detail which places additional level of confidence on the physical quantities mined every year.

As a result, the financial analysis demonstrates a robust margin per ton for the entire life of SDJ project.

12. RECOMMENDATIONS

Following are the major recommendations from SMGC with respect to the mining strategy and activities at SDJ project:

1. The SDJ concession is surrounded by its two neighbours who share extensions of the same deposit with SDJ to the East and West. As per the existing Mutual Mining Agreements between these three parties, a joint mine plan will be developed soon for the most effective exploitation of this deposit. SMGC highly recommends this and believes that this will also increase the value of the entire deposit.
2. All pit floors should to be cleaned of all soft material prior to dumping and the bottom layer of all dumps will be selected from hard material to ensure the dump foundation is strong.
3. Trenches should be dug in the floor of all dumps parallel to the toe prior to dumping in order to disrupt the floor layer and lock in the toe of the dump
4. Failure of In-pit dumps is a common incidence in Indonesia for open cast mines mostly in deposits with soft waste material. The high amount of rainfall also increases the chances for these failures. However, a few simple but crucial steps prior to the start of In-pit dumping can reduce the chances significantly. These steps are mainly:
 - a. removing of slushy material from the base of the dump
 - b. prohibiting water to accumulate at the back of the dump
 - c. dumping hard material from the pit at the bottom benches
 - d. putting a toe stabilising bund of appropriate size where required
 - e. ensuring proper drainage to run off all the rain water from the dump
 - f. keeping a safe distance between the toe of the in-pit dump and the working faces
 - g. adhering to the geotechnical advices for the slopes and berms

13. REFERENCES

1. PT SMG Consultants, "JORC Resource Statement, PT Sungai Danau Jaya, dated December 2015."
2. PT SMG Consultants, "JORC Reserve Statement, PT Sungai Danau Jaya, dated December 2015."
3. PT SMG Consultants, "Life of Mine Plan, PT Sungai Danau Jaya, dated December 2014."
4. Preston, KB and Sanders, RH, "Estimating the In-situ Relative Density of Coal", Australian Coal Geology, Vol 9, pp 22-26, May 1993
5. Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves, 2003
6. ASTM Guidebook of Thermal Coal, APBI-ICMA 2007
7. "Optimum Design of Open-Pit Mines", Joint C.O.R.S and O.R.S.A. Conference, Montreal, May 27-29, 1964
8. Australasian Code for Reporting of Mineral Resources and Ore Reserves, (The JORC Code), 2012

14. GLOSSARY

AC	Acid Consuming
ad	Air dried
adb	Air dried basis
AF	Acid Forming
AMDAL	"Analisis Mengenai Dampak Lingkungan Hidup" which translates to "Environmental Impact Analysis"
ANDAL	"Analisis Dampak Lingkungan Hidup" which translates to "Environmental Impact Analysis report, which is part of the AMDAL"
AS	Australian Standards
ar	As received
ARD	Acid Rock Drainage
ASTM	American Society for Testing and Materials
bcm	Bank cubic metre
capex	Capital costs
CCoW	Coal Contract of Work
CHPP	Coal Handling and Processing Plant
CI	Coking Index CV Measure of energy (kilocalorie) per kilogram
FC	Fixed carbon
GAR	Gross As Received
GERL	Geo Energy Resources Limited
ha	Hectare
HBA	"Harga Batubara Acuan" which translates to "Coal Price Reference"
HE	Hydraulic Excavator
HGI	Hardgrove Grindability Index
HPB	"Harga Patokan Batubara" which translates to "Coal Standard Price"
hr	Hour
IM	Inherent Moisture
IRR	Internal Rate of Return
ISP	Intermediate stockpile
IUP	"Izin Usaha Pertambangan" which translates to "Mining Business License"
JORC	Australian Institute of Mines and Metallurgy Joint Ore Reserves Committee
kcal/kg	Unit of energy (kilocalorie) per kilogram
kg	Kilogram
km	Kilometre
KP	"Kuasa Pertambangan" which translates to "Mining Rights"
kt	Thousand tonne
kV	Kilovolt
l	Litre
LAS	log ASCII standard
lcm	Loose cubic metre
LIDAR	Light Detection and Ranging
LOM	Life of Mine
m ³	Cubic Metre
m	Metre
M	Million
Mbcm	Million bank cubic metres
Mbcm _{pa}	Million bank cubic metres per annum
m/s	Metres per second

Mt	Million tonne
Mtpa	Million tonnes per annum
MW	Megawatt
NAF	Non Acid Forming
NAR	Nett As Received
NPV	Net Present Value
Opex	Operating costs
pa	per annum
PAF	Potential Acid Forming
PPE	personal protective equipment
RD	Relative Density
RKL	Rencana Pengelolaan Lingkungan Hidup which translates to "Environmental Management Plan, which is part of the AMDAL"
RL	Relative Level (used to reference the height of landforms above a datum level)
ROM	Run-of-Mine
RPL	Rencana Pemantauan Lingkungan Hidup which translates to "Environmental Monitoring Plan, which is part of the AMDAL"
SDJ	PT Sungai Danau Jaya
SE	Specific Energy
SMGC	PT SMG Consultants
SR	Strip ratio (of waste to ROM coal) expressed as bcm per tonne
SOP	Standard operating procedure
ST	Seam Thickness
t	Tonne
tkm	Tonne kilometre
TM	Total Moisture
t/m3	Tonne per cubic metre
tpd	Tonnes per day
tph	Tonne per hour
TS	Total Sulphur
TM	Total Metals
VM	Volatile Matter

Appendix A – Consent Template

[Letterhead of Competent Person or Competent Person's employer]

Competent Person's Consent Form

Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

Report name

Qualified Person's Report

(Insert name or heading of Report to be publicly released) ('Report')

Geo Energy Resources Limited

(Insert name of company releasing the Report)

PT Sungai Danau Jaya

(Insert name of the deposit to which the Report refers)

If there is insufficient space, complete the following sheet and sign it in the same manner as this original sheet.

December 2015

(Date of Report)

Statement

I/We,

(Insert full name(s))

confirm that I am the Competent Person for the Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member or Fellow of *The Australasian Institute of Mining and Metallurgy* or the *Australian Institute of Geoscientists* or a 'Recognised Professional Organisation' (RPO) included in a list promulgated by SGX from time to time.
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of

(Insert company name)

Or

I/We am a consultant working for

(Insert company name)

and have been engaged by

(Insert company name)

to prepare the documentation for

(Insert deposit name)

on which the Report is based, for the period ended

(Insert date of Resource/Reserve statement)

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Exploration Targets, Exploration Results, Mineral Resources and/or Ore Reserves (select as appropriate).

Consent

I consent to the release of the Report and this Consent Statement by the directors of:

(Insert reporting company name)

Signature of Competent Person:

Date:

Professional Membership:
(insert organisation name)

Membership Number

Signature of Witness

Print Witness Name and Residence
(eg town/suburb)

Additional deposits covered by the Report for which the Competent Person signing this form is accepting responsibility:

Additional Reports related to the deposit for which the Competent Person signing this form is accepting responsibility:

Signature of Competent Person:

Date:

Professional Membership:
(insert organisation name)

Membership Number

Signature of Witness

Print Witness Name and Residence
(eg town/suburb)

Appendix B – Contributors to Report

Keith Whitchurch – Principal Mining Engineer

Qualifications:	BE (Mining - Hons), MEngSc (Research) MAusIMM (CP); RPEQ
Contribution:	Oversight and Supervision of Project
Experience:	Keith has over 30 years' experience in open cut coal mining in the areas of geological modelling, reserves evaluation, pit optimisation, mine design, equipment selection, mine scheduling, backfill design and planning, project costing and economics. Over the last 13 years Keith has specialised on the Indonesian mining industry as team leader on numerous projects including technical, due diligence and corporate aspects of coal, gold, nickel, iron ore and uranium.

Joyanta Chakraborty – Senior Mining Engineer

Qualifications:	BE (Mining), MAusIMM
Contribution:	Overall project supervision, cross checks, report writing.
Experience:	Joy has over 12 years' experience in open cut coal mining in the areas of operations, reserves evaluation, pit optimisation, mine design, equipment selection, mine scheduling, project costing and economics. Joy has worked 4 years in India and for the last 8 years he is working in Indonesia.

Kim Knerr – Principal Mining Engineer

Qualifications:	BE (Mining), MAusIMM
Contribution:	Peer Review
Experience:	Kim has over 28 years' experience in open cut mining. His experience covers projects in gold, silver, nickel, iron ore, uranium, beryllium, tar sands and coal. His emphasis is in geological modelling, reserves evaluation, pit optimisation, mine design and scheduling, economics, and project management.

Appendix C – Appendix 7.5 of the SGX Mainboard rules

Appendix 7.5 Summary of Reserves and Resources
Cross-referenced from Rules 705(7), 1207(21) and Practice Note 6.3

The following information is provided for each asset of the issuer. The format of this table is not in compliance with the JORC Code and should not be disclosed separate to this report.

1. Summary of Mineral Reserves and Resources

Name of Asset/Country: PT Sungai Danau Jaya / Indonesia

Category	Mineral Type	Gross Attributable to Licence		Net Attributable to Issuer			Remarks
		Tonnes (millions)	Grade	Tonnes (millions)	Grade	Change from previous update (%)	
Reserves							
Proved	Coal	33.4	Subbituminous B	22.0	Subbituminous B	NA	No change
Probable	Coal	9.0	Subbituminous B	5.9	Subbituminous B	NA	No change
Total	Coal	42.4	Subbituminous B	27.9	Subbituminous B	NA	No change
Resources *							
Measured	Coal	42.1	Subbituminous B	27.8	Subbituminous B	NA	No change
Indicated	Coal	14.1	Subbituminous B	9.3	Subbituminous B	NA	No change
Inferred	Coal	2.2	Subbituminous B	1.4	Subbituminous B	NA	No change
Total	Coal	58.4	Subbituminous B	38.5	Subbituminous B	NA	No change

* Measured and Indicated Resources are inclusive of Reserves

Name of Qualified Person: Keith Whitchurch

Date: 16 February 2016

Professional Society Affiliation / Membership: AusIMM / 103634

Appendix D – Disclosure Requirements for Mineral, Oil and Gas Companies

Practice Note 6.3 Disclosure Requirements for Mineral, Oil and Gas Companies

Qualified Persons Report Section 5.4

Sl. No.	Criteria	Explanation
(a)	Title page	Available
(b)	Table of contents	As provided in page i - ii
(c)	Executive summary	As provided in Section 1 of
(d)	<p>Introduction</p> <ul style="list-style-type: none"> Full name, and if applicable, the partner/director in charge of the report; professional qualifications, years of relevant experience, Professional Society Affiliations and Membership (including details of a recognised professional association) of the qualified person and the address of the qualified person's firm/company Statement of independence by the qualified person, if the report is prepared by an independent qualified person who meets the requirements in Rule 210(9)(b) Aim of the report Scope of the report Statement on the use of the report Basis of the report - including data sources, data validation and reliance on other experts Standard used Whether a site visit has been undertaken (if so, when the site visit was undertaken and by whom and if a site visit has not been undertaken a satisfactory reason as to why not). 	<ul style="list-style-type: none"> As discussed in Section 2 As provided in Section 2.3 As discussed in Section 2 As discussed in Section 2 As discussed in Section 2 As discussed in Section 2 As discussed in Section 2 As discussed in Section 2
(e)	<p>Property description, size, location, access, natural and cultural environment</p> <ul style="list-style-type: none"> listing applicant's/issuer's assets and liabilities, including the following summary table of assets: Nature and extent of listing applicant's/issuer's rights of exploration or extraction <ul style="list-style-type: none"> Asset name/ Country Issuer's interest (%) Development Status Licence expiry date Licence area Type of mineral Remarks Description of the economic conditions for the working of the licenses, concessions or similar, with details of the duration and other principal terms and conditions of the concessions including fiscal conditions, environmental and rehabilitation requirements, abandonment costs and any necessary licenses and consents including planning permission. 	<ul style="list-style-type: none"> The tenure is held under an IUP Operasi Produksi <ul style="list-style-type: none"> As discussed in Section 3.1 100 % As discussed in Section 3.2 As discussed in Section 3.2 As discussed in Section 3.2 As discussed in Section 3.2 As discussed in Section 3.2 As discussed in Section 3.2

(f)	History of the property, including exploration history and any production history	<ul style="list-style-type: none"> As discussed in Section 2 and Section 5.1
(g)	Geological and geophysical setting, type and characteristics of the deposit/accumulation	<ul style="list-style-type: none"> As discussed in Section 4
(h)	Exploration data including drilling and sampling, sampling and analysis methods, sample preparation and security, quality assurance and quality control on the sample analyses	<ul style="list-style-type: none"> As discussed in Section 5.2 - 5.4
(i)	Mineral processing and metallurgical testing, if applicable	<ul style="list-style-type: none"> Not applicable
(j)	Resource and reserve estimates and exploration results, as applicable, in accordance with the relevant Standard, including a summary of reserves and resources in the form of Appendix 7.5	<ul style="list-style-type: none"> Appendix C
(k)	<ul style="list-style-type: none"> Planned extraction method, Processing method, Capital costs, Operating costs, Considerations including social, environmental, health and safety factors that may affect exploration and/or exploitation activities; and production schedule, if applicable 	<ul style="list-style-type: none"> As discussed in Section 6.2 As discussed in Section 8.1 As discussed in Section 9.3 As discussed in Section 9.4 SMGC is not aware of any social, environmental, health and safety factors which may hinder the economic extraction of the Coal Reserves
(l)	Financial analysis of the operations, taxes, liabilities, marketing if applicable	<ul style="list-style-type: none"> As discussed in Section 2.1 and Section 9
(m)	Interpretation and conclusions	<ul style="list-style-type: none"> As discussed in Section 11
(n)	Recommendations, if any	<ul style="list-style-type: none"> As discussed in Section 12
(o)	References	<ul style="list-style-type: none"> As discussed in Section 13
(p)	Date and signature page	<ul style="list-style-type: none"> Appendix A, Consent form
(q)	Illustrations — of sufficient clarity to graphically present the material within the text. Maps must include a geographical reference system and scale bar for clarity. Technical drawings must include a legend to explain features within the diagram.	<ul style="list-style-type: none"> Provided as applicable
(r)	Appendices and glossary of terms used, if required	<ul style="list-style-type: none"> As discussed in Section 14

Section 2: Qualified Person's Report
BEK Mine Concession

BEHRE DOLBEAR

Minerals Industry Advisors

**YEAR-END 2015 UPDATE OF
JORC RESOURCES AND RESERVES FOR
BUMI ENGGANG KHATULISTIWA COAL MINE PROJECT
EAST KALIMANTAN PROVINCE, INDONESIA**

07 JANUARY 2016



**天然煤矿集团
GEO ENERGY GROUP**

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BEHRE DOLBEAR

Minerals Industry Advisors

07 January 2016

The Directors
Geo Energy Resources Limited
12 Marina Boulevard #16-01
Marina Bay Financial Centre Tower 3
Singapore 018982

Via email to: charles@geocoal.com
cheangshiong.tan@geocoal.com

RE: Behre Dolbear Project 15-120 – Year-End 2015 Update of JORC Resources and Reserves for Bumi Enggang Khatulistiwa Coal Mine Project

Gentlemen:

Behre Dolbear Asia, Inc. (Behre Dolbear), a wholly-owned subsidiary of Behre Dolbear Group Inc., located at the address below, herewith submits its independent technical report (“Independent Qualified Person’s Report” or “Report”) titled *Year-End 2015 Update of JORC Resources and Reserves for Bumi Enggang Khatulistiwa Coal Mine Project (BEK Mine), East Kalimantan Province, Indonesia*, dated 07 January 2016.

This Report updates certain aspects of Behre Dolbear’s 13 February 2015 Report titled *Year-End 2014 Update of JORC Resources and Reserves for Bumi Enggang Khatulistiwa Coal Mine Project, East Kalimantan Province, Indonesia*. The 13 February 2015 Report summarized coal resources and reserves of the BEK Mine, as of 31 December 2014. That Report was preceded by Behre Dolbear’s March 2014 Report titled *JORC Resource and Reserve Update for Bumi Enggang Khatulistiwa Coal Mine Project (“BEK Mine”) East Kalimantan Province, Indonesia* and Behre Dolbear’s 29 March 2012 report titled *Independent Technical Review of the Bumi Enggang Khatulistiwa Coal Mine Project in East Kalimantan Province, Indonesia* (the “Original Report”).

Behre Dolbear understands that this Report will be used to satisfy certain requirements related to filings by Geo Energy Resources Limited (the “Company”) on the Singapore Exchange.

This update of the BEK Mine resources and reserves is based upon information in the Original Report, the March 2014 Report, and the February 2015 Report. It also relies upon information gathered during a site visit by Behre Dolbear’s Qualified Person in December 2015, and updated data provided by the Company during that visit. This Independent Qualified Person’s Report includes a current examination of resources and reserves for JORC compliance; it reflects mine depletion from the start of operations in February 2012 through 31 December 2015. It is based upon information compiled by Mr. Norris E. Brooks, Dr. Robert E. Cameron, and their team of experts.

The Behre Dolbear team consisted of senior-level mining experts from Behre Dolbear's Denver office in the United States and the Hong Kong Office in China. This Report has been prepared in accordance with the requirements of the SGX Main Board Listing Rules and SGX-ST Listing Rules Practice Note 6.3, as issued by the Singapore Exchange Securities Trading Limited. Mr. Brooks, the professional who developed this Independent Qualified Person's Report, meets the applicable requirements of the SGX-ST Listing Rules and he authorizes the Company to publish the Report as written.

He is a Senior Associate of Behre Dolbear and he has extensive experience, which is relevant to the style of mineralization and type of deposit reviewed herein. Mr. Brooks and Dr. Cameron are "Competent Persons," as defined in the JORC Code 2012 Edition, as later defined herein. They are also "Qualified Persons," as defined in the SGX Listing Rules. Subject to the industry-standard disclaimer stated in Section 2.2 of the Report regarding the underlying data, both experts take responsibility for the contents of the Report.

Coal resources and coal reserves, defined at the BEK Mine properties, have been reviewed for conformity with the December 2012 Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (the "JORC Code 2012 Edition").

Behre Dolbear is independent of Geo Energy Resources Limited, the BEK Mine, and its properties. Neither Behre Dolbear nor any of its employees or associates involved in the preparation of this Report have any direct or indirect pecuniary interests of any kind (whether past, present, or contingent) in the Company or the BEK Mine properties, any of the assets being reported on, or any group, holding, or associated entity of the Company. None of Behre Dolbear's partners, officers, employees, or associates is an officer, employee, or proposed officer of the Company or any group, holding, or associated entity of the Company. Behre Dolbear does not have any claims outstanding with the Company, its assets, or any group, holding, or associated entity of the Company.

Behre Dolbear is to receive a fee for its services (the work product of which includes this Report) at its normal commercial rates and on customary payment schedules. Payment of Behre Dolbear's professional fee is not contingent upon the content or the results of this Report.

The sole purpose of this Independent Qualified Person's Report is for use by the Company and its advisors in connection with filings on the SGX-ST. This Report cannot be used or relied upon for any other purpose. This transmittal letter is an integral part of, and is to be included with any publication of, the Report. Neither the whole, nor any part, of this Report, nor any reference thereto may be included in, with, or attached to any document or used for any other purpose without Behre Dolbear's prior written consent to the form and context in which it appears.

Yours faithfully,

BEHRE DOLBEAR ASIA, INC.



Norris E. Brooks, Qualified Person, MMSA QP Member No. 01404QP
Senior Associate and Project Manager

cc: Alastair McIntyre, Senior Managing Director – Asia

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1.0 EXECUTIVE SUMMARY

The Bumi Enggang Khatulistiwa coal mine project (BEK Mine) is an open cut surface coal mine in the Kutai Barat Regency, East Kalimantan, Indonesia. It has a design production rate of 2.0 to 3.0 million tonnes per year. BEK Mine production started in February 2012. Geo Energy Resources Limited (Company) is the current owner of the BEK Mine.

In its 13 February 2015 report titled *Year-End 2014 Update of JORC Resources and Reserves for Bumi Enggang Khatulistiwa Coal Mine Project*, Behre Dolbear Asia, Inc. (Behre Dolbear) estimated that, as of 31 December 2014, the total in-place coal resources for the BEK Mine (in addition to reserves) were 29.7 million tonnes.

In anticipation of this Report, the Company has certified to Behre Dolbear that, due to continued adverse market conditions, *i.e.*, low coal prices, no coal was produced at BEK Mine during 2015.

Behre Dolbear has reviewed the Company's operating records, the BEK Mine's operating activities during the calendar year 2015, and other pertinent data required to confirm the resource and reserve tonnages represented by the Company.

Behre Dolbear has confirmed that, as of 31 December 2015, in addition to its coal reserves, the BEK Mine had total coal resources of 29.7 million tonnes, 1.0 million of which were Measured, 6.3 million of which were Indicated, and 22.4 million of which were Inferred, as shown in Table 1.1. As of that same date, the BEK Mine had Proved Reserves of 3.8 million tonnes and Probable Reserves of 7.3 million tonnes, for a total of 11.1 million tonnes, as shown in Table 1.2. Section 7.0 of this Report describes the categorization of these resources and reserves in greater detail.

TABLE 1.1 COAL RESOURCES OF BEK MINE, AS OF 31 DECEMBER 2015¹ (MILLION TONNES – AIR DRIED BASIS)				
Ore Type	Measured Resource	Indicated Resource	Inferred Resource	Total
Thermal Coal	1.0	6.3	22.4	29.7
¹ Resources are in addition to coal reserves.				

TABLE 1.2 COAL RESERVES OF BEK MINE, AS OF 31 DECEMBER 2015 (MILLION TONNES – AIR DRIED BASIS)					
Commodity Deposit	Mining Method	Coal Type	Proved Coal Reserve	Probable Coal Reserve	Total Coal Reserve
BEK Coal Mine	Open Cut	Thermal	3.8	7.3	11.1

2.0 INTRODUCTION

2.1 STATEMENT OF HISTORICAL ENGAGEMENTS

In a Consulting Services Agreement dated 05 December 2011, PT Prima Energytama engaged Behre Dolbear to perform an independent technical review of the BEK Mine. As part of that report, PT Prima Energytama required a JORC-compliant statement with respect to the BEK Mine's coal resources. On 29 March 2012, Behre Dolbear issued its report titled *"Independent Technical Review of the Bumi Enggang Khatulistiwa Coal Mine Project in East Kalimantan Province, Indonesia"* (the "Original Report").

In a Consulting Services Agreement dated 04 December 2013, the Company engaged Behre Dolbear to prepare an Independent Qualified Person's Report that would update the BEK Mine coal resources and reserves in the context of the Original Report and in compliance with the JORC Code 2012 Edition. The "JORC Code 2012 Edition" is herein defined as the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia in 1999 and revised in 2012". On 31 March 2014, Behre Dolbear issued its report titled *"JORC Resource and Reserve Update for Bumi Enggang Khatulistiwa Coal Mine Project (BEK Mine), East Kalimantan Province, Indonesia"*.

In a Consulting Services Agreement dated 27 November 2014, the Company engaged Behre Dolbear to prepare an Independent Qualified Person's Report that would further update the BEK Mine coal resources and reserves, again, in compliance with the JORC Code 2012 Edition. That Report titled *Year-End 2014 Update of JORC Resources and Reserves for Bumi Enggang Khatulistiwa Coal Mine Project East Kalimantan Province, Indonesia* was issued on 13 February 2015.

The 31 March 2014 and 13 February 2015 reports herein are referred to as the "Interim Reports."

In a Consulting Services Agreement dated 28 October 2015, the Company engaged Behre Dolbear to prepare an Independent Qualified Person's Report that would update the BEK Mine coal resource and reserve estimates as of 31 December 2015, again in compliance with the JORC Code 2012 Edition. This Report is a result of that engagement.

The Original Report presented an in-depth study of the BEK Mine's geological setting, stratigraphic formations, coal seams, physical and chemical characteristics of the coal, mine planning, transportation, infrastructure, and environmental/regulatory/social issues. It also analyzed the Company's actual and forecasted revenues, operating costs, and capital spending schedules. During the development of the Interim Reports and again in the development of this Report, Behre Dolbear's experts studied those aspects of the BEK Mine and have made comments herein, as appropriate. This Report relies upon and by reference incorporates the Original Report and the Interim Reports.

Key members of the team that developed the Original Report and the Interim Reports were assigned to develop this Report. In the development of this Report, information in the Original Report and the Interim Reports was reviewed and reconfirmed by the Company. Certain new information was provided by BEK Mine personnel and the Company. The Qualified Person responsible for this Report visited the BEK Mine site and inspected the Company's properties and operations on 02 December 2015.

In the context of the Original Report and the Interim Reports and to facilitate preparation of this Report, the Company has stated that, with the exception of coal production and shipping activities during 2012, 2013, and 2014, no material changes have occurred to the above aspects of the Company's business or operation of the BEK Mine. Behre Dolbear has relied upon these

representations and has focused this Report on the status of coal resources and reserves assigned to the BEK Mine.

This Report is based upon information compiled and analyzed by Mr. Norris E. Brooks and Dr. Robert E. Cameron, both of whom are “Competent Persons,” as defined by the JORC 2012 Edition and “Qualified Persons,” as described in the SGX Main Board Listing Rules and SGX-ST Listing Rules Practice Note 6.3. Signed personal declarations regarding the qualifications of these two professionals are included in Appendix 1.0. The Behre Dolbear project team also included senior-level mining experts from Behre Dolbear’s Denver office in the United States and its Hong Kong Office.

This Independent Qualified Person’s Report is expected to be a part of certain filings the Company is preparing to submit on the Singapore Stock Exchange (SGX-ST).

2.2 DISCLAIMER

Behre Dolbear experts conducted an independent technical review, made a site visit, and performed a field inspection of the BEK Mine. Behre Dolbear has exercised all due care in reviewing information supplied by others and believes that the data and other basic assumptions are factual and correct and that the Company’s representations are reasonable and consistent with the industry’s best practices. Behre Dolbear has independently analyzed data provided by others, but the accuracy of the conclusions resulting from that review is dependent upon the accuracy of the supplied data. Behre Dolbear does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from investment or other financial decisions or actions by others.

2.3 ELECTRONIC DISCLAIMER

Electronic mail copies of this Report are not official unless authenticated and signed by Behre Dolbear and are not to be modified in any manner without Behre Dolbear’s express written consent.

2.4 UNITS USED IN THIS REPORT

The metric system is used throughout this Report and the currency used is the United States dollar (US\$). When units in other systems and other currencies are used, they are identified in the text.

3.0 SCOPE OF WORK

In March 2012, Behre Dolbear prepared a comprehensive independent technical review of the BEK Mine, which included a JORC-compliant estimate of the coal resources and reserves contained within the property. Since that date, Behre Dolbear has also developed certain Interim Reports for the Company. The purpose of this Report is to update the estimation of the BEK Mine's coal resources and reserves as of 31 December 2015.

The BEK Mine is located in the northeast portion of the Kutai Barat Regency in East Kalimantan Province, Indonesia (Figure 3.1).

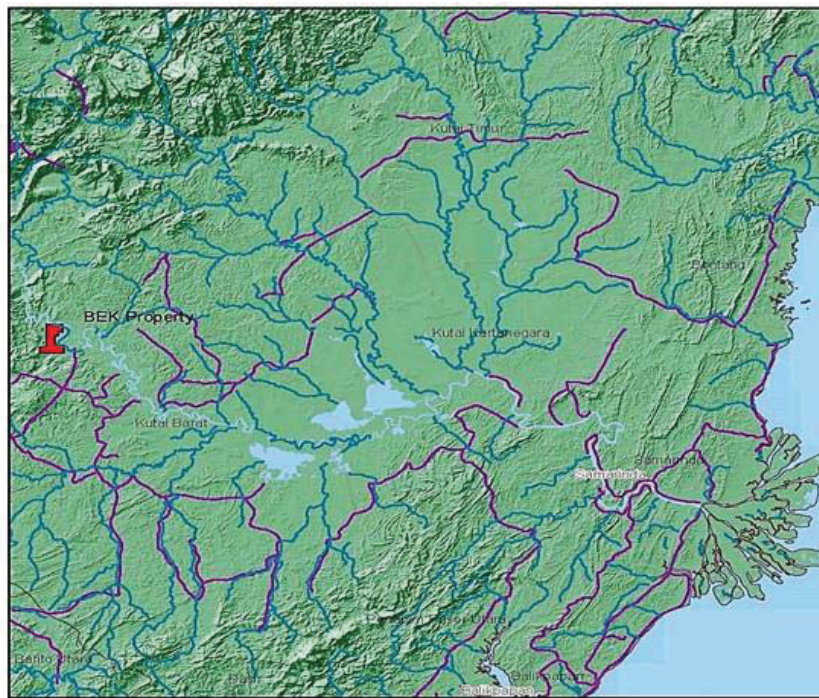


Figure 1: BEK Property Location Map



Figure 3.1. Location of the BEK Mine

4.0 CONCESSION AND LICENSES

Through PT Sumber Bara Jaya, Geo Energy Resources Limited acquired the BEK Concession and is the ultimate and rightful concession holder of the claims described in the Original Report. Through BEK, the Company holds the Concession, which encompasses approximately 4,570 hectares. BEK was incorporated in March 2008. On 09 April 2011, BEK obtained its IUP Operation and Production (Mining License for Operational Production) from the Regent of Kutai Barat under its Decree No. 545/K.287a/2011 dated 04 April 2011. Table 4.1 shows a brief summary of the BEK Concession License.

BEK reports that the mining taxes have been paid, its legal status is in force and free of any liens or encumbrances, and therefore, BEK is considered to be in good legal standing.

TABLE 4.1 SUMMARY OF BEK CONCESSION LICENSE						
Asset Name/Country	Interest (%)	Development Status	License Number and Expiry Date	License Area	Type of Mineral Deposit	Remarks
BEK Mine Indonesia	100	In Production	545/k.287a/2011 4 April 2031	4,570 hectares	Coal	Permit is extendable upon compliance with the prevailing laws and regulations

4.1 ENVIRONMENTAL AND RECLAMATION STATUS

Mines working near the BEK Concession have been historically limited to small pits and exploration drilling with minimal environmental impacts. Regulations require the development of an Environmental Impact Assessment Statement/Report (EIA/ANDAL). BEK's EIA/ANDAL was approved on 02 September 2010, as evidenced by Decree of Kutai Barat Regent No. 660.5/011/ANDAL/BLH-KBR/IX/2010 (the "Decree"). During the December 2015 site visit, Behre Dolbear was informed that the Decree remains in force. Behre Dolbear observed that BEK Mine reclamation activities had proceeded and that reclamation was up to date.

4.2 PERMIT STATUS

BEK currently holds an IUP Operation and Production permit, which allows the BEK Concession owner to carry out various mining activities, such as development, mining, processing, refining, transportation, and sales activities. BEK has obtained permits for reclamation and post-mining activities plan, as approved by Kutai Barat Regent under its Decree No. 540/069.A/DISTAMBEN-TU.P/I/2012 and No. 540/070.A/DISTAMBEN-TU.P/I/2012, both dated 30 January 2012. The Company states that these permits remain in full force and effect.

4.3 SURFACE RIGHTS

BEK holds the mining rights to approximately 4,570 hectares of which approximately 1,000 hectares are in the area to be mined. As of 14 February 2012 BEK, had successfully negotiated surface rights to 693 hectares from the surface property owners. The Company has acquired surface rights to all of the area to be mined during the initial 4-year period of its existing and permitted mining plans. There has been no hearing of Project Affected Parties that might oppose BEK's operations.

5.0 GEOLOGIC SETTING, EXPLORATION, AND OPERATING HISTORY

Within the BEK Mine Concession, coal deposits are found in Eocene to Early Miocene sediments that consist primarily of freshwater deposits that were deposited in a coastal plain environment. The structure of the area is relatively simple with the coal-bearing strata dipping 2° to 5° to the southeast. No significant faulting has been identified in the area that would affect mining, but the possibility exists for minor normal faulting within the proposed mine area.

Initial exploration of the BEK Mine Concession included 276 drill holes within the areas of the property considered to have the best coal potential. Within the areas targeted for mining, the drill hole spacing was 200 meters × 200 meters and in some areas 100 meters × 100 meters. Drilling within the BEK Mine Concession has identified as many as 7 coal seams. The strata encountered during drilling represent an active fluvial depositional environment with sandstone, siltstone, mudstone, claystone, and coal beds throughout the section. The active depositional environment is demonstrated by the partings and splitting of the coal beds near the fluvial channels. One of the uppermost coal beds (G Seam) is laterally persistent and appears to have the greatest potential for development.

Behre Dolbear believes that the drilling protocols and data collected during the BEK Mine exploration programs are sufficient for mine planning purposes and for the determination of reserves. The Original Report and Interim Reports discuss these matters in greater detail.

Mining operations started in February 2012. The Company's records show that since that time 2.4 million tonnes have been produced from 6 separate mining blocks, 2 of which have been mined out. In 2013, additional drilling was conducted away from the active mine area to define additional shallow resources. BEK completed 105 additional drill holes to better define the original mine plan reserves and identify 2 additional small pit areas.

The reader is referred to Section 6.0, Section 7.0, and Appendix 2.0 of this Report, which describe Behre Dolbear's approach to data analysis and further detail regarding the BEK Mine's resource and reserve determinations.

6.0 DISCLOSURE OF INFORMATION PREPARED BY THE COMPETENT PERSON

The JORC Code 2012 Edition provides a checklist that is intended to enhance disclosure of the material information used by a Competent Person to support the Public Reporting of Exploration Results, Mineral Resources, and Ore Reserves. JORC Table 1, titled *Checklist of Assessment and Reporting Criteria*, is to be used in the context of complying with the Principles of the JORC Code. The Competent Person is required to address the elements of JORC Table 1 in his/her resource and reserve report. The JORC 2012 Edition requires that a Public Report include detailed reporting of the relevant criteria listed in Table 1. Specifically, Sections 1, 3, and 4 from the JORC Table 1 template were determined by Behre Dolbear to be relevant for this Report. Appendix 2.0 contains information in the format prescribed by JORC Table 1 and presents other information relevant to this Report.

7.0 COAL RESOURCE AND RESERVE STATEMENT – AS OF 31 DECEMBER 2015

The JORC Code 2012 Edition requires the use of reasonable technical, operational, and economic assumptions when categorizing reserves. These include, but are not limited to, confirmation of mining rights and licenses, geological review, mining plan validation, operating cost validation, and long-range commodity price forecasts to support revenue assumptions. Coal resource and reserve estimates are dynamic and are influenced by changing economic conditions, technical issues, mining rates, environmental regulations, and relevant new information, and therefore, can vary from year to year. Behre Dolbear is of the opinion that its assessment of the BEK Mine resources and reserves, as of 31 December 2015, includes recognition of the above factors.

Reserve estimates in the Interim Reports were adjusted to reflect the BEK Mine coal production during 2012, 2013, and 2014 and to reflect the permitted mine plans developed by BEK. Since no coal was produced at the BEK Mine during the period from 31 December 2014 through 31 December 2015, and since no material adverse events have impacted the BEK coal resource base during that period, Behre Dolbear has concluded that the BEK reserve base remains as stated in the 13 February 2015 Report. Those resource and reserve estimates are presented below.

7.1 BEK MINE COAL RESOURCES

Based upon the Company's representations and its own data reviews, Behre Dolbear has concluded that:

- There were no changes to the BEK Mine's resource model during 2015.
- Resource areas designated in the Original Report and Interim Reports remained unchanged.

Table 7.1 shows the BEK Mine's coal resources as of 31 December 2015. These resources are estimated in compliance with the JORC Code 2012 Edition, as defined above.

TABLE 7.1 UPDATED RESERVES AND RESOURCES FOR BEK COAL MINE ¹ (AS OF 31 DECEMBER 2015)							
Category	Mineral Type	Gross Attributable to BEK Mine		Net Attributable to BEK Mine			Remarks ³
		Tonnes ² (million)	Grade	Tonnes ² (million)	Grade	Change from 31 December 2013 (%)	
Reserves							
Proved	Coal	3.8	N/A	3.8	N/A	0.0	See Note 3
Probable	Coal	7.3	N/A	7.3	N/A	0.0	See Note 3
Total Reserves		11.1	N/A	11.1	N/A	0.0	
Resources							
Measured	Coal	1.0	N/A	1.0	N/A	0.0	See Note 3
Indicated	Coal	6.3	N/A	6.3	N/A	0.0	See Note 3
Inferred	Coal	22.4	N/A	22.4	N/A	0.0	See Note 3
Total Resources		29.7	N/A	29.7	N/A	0.0	See Note 3
¹ Measured, Indicated, and Inferred Resources are in addition to Reserves							
² Air Dried Basis							
³ Refer to Appendix 2.0 (JORC Table 1) for Remarks							

7.2 BEK MINE COAL RESERVES

Based upon the Company's representations and its own data reviews, Behre Dolbear has concluded that:

- BEK Mine planning and production schedules are clearly defined.
- BEK Mine continues to control the BEK Mine properties.
- The Company has provided sufficient documentation showing that it has the rights and licenses required to legally operate the BEK Mine.
- Reserves have been adjusted from the Original Report to reflect mine plan changes and coal production.
- Reserves now include two new small pit areas (Pits E and F) that were not described in the Original Report.

Current reserve tonnages reflect the effects of mining activity and reserve depletion (or lack thereof) during 2012, 2013, 2014, and 2015.

Table 7.1 presents the coal reserves of the BEK Mine as of 31 December 2015. These reserves are estimated in compliance with the JORC Code 2012 Edition.

Further discussion of the factors, considered by Behre Dolbear during this update, is presented in Appendix 2.0 in a format consistent with JORC Code 2012 Edition Table 1.

APPENDIX 1.0
DECLARATION OF INDEPENDENT QUALIFIED PERSONS

NORRIS E. BROOKS
ROBERT E. CAMERON, PH.D.

IN SUPPORT OF
UPDATE OF JORC RESOURCES AND RESERVES
BUMI ENGGANG KHATULISTIWA COAL MINE PROJECT
EAST KALIMANTAN PROVINCE, INDONESIA
AS OF 31 DECEMBER 2015

**DECLARATION OF INDEPENDENT QUALIFIED PERSON –
NORRIS E. BROOKS**

With respect to the attached Independent Qualified Person's Report, I, Norris E. Brooks, certify that, to the best of my knowledge and belief:

- 1) I am an Independent Qualified Person in accordance with the requirements of the SGX-ST Listing Rules for Mineral, Oil and Gas Companies issued by the Singapore Exchange Securities Trading Limited.
- 2) I have more than 30 years of international experience in the coal industry including coal mines, properties, and facilities that are substantially similar to the coal mines, properties, and facilities described in the attached Report. That experience includes estimation, assessment, and evaluation of coal-bearing properties, coal mine operations, coal preparation plants, and feasibility studies related to such matters.
- 3) I am a registered member of the Mining and Metallurgical Society of America (MMSA), holding Qualified Professional Member No. 01404QP. MMSA is a self-regulatory association of mining industry professionals that:
 - a) admits members on the basis of academic qualifications and experience
 - b) requires compliance with the organization's professional standards of competence
 - c) requires compliance with a code of professional ethics
 - d) has disciplinary powers to suspend or expel a member
- 4) I supervised the team described in the Report and I am responsible for its content. I have visited and made physical inspections of the properties, facilities, and operations described in the Report.
- 5) I am acting as a Senior Associate of Behre Dolbear Asia, Inc. and I am not a sole practitioner.
- 6) I am personally independent of Geo Energy Resources Limited and BEK Mine management, and their affiliates, shareholders and directors.
- 7) The sole remuneration for my professional services and the services of my Report team is in the form of hourly fees. My compensation is not dependent upon the attainment of any stipulated result, the occurrence of any subsequent event, or the reporting of any predetermined technical, operational, or financial information that favors Behre Dolbear's client.
- 8) I have no direct or indirect, present or prospective, pecuniary interest in the companies, mines, or properties that are the subject of the Report or in any of the Company's affiliates and subsidiaries, and I will receive no financial benefits other than the above hourly fees for professional services.
- 9) I have not been found in breach of any relevant rule or law and I am not the subject of any disciplinary proceeding. I am not the subject of any investigation that might lead to a disciplinary proceeding by any regulatory authority or any professional association.
- 10) Information in the Report has been obtained from sources believed to be reliable. The Report team and I considered all reasonably available information, which has a bearing on the Report and no facts have been intentionally disregarded.

- 11) The analysis, opinions, and conclusions presented in the Report were developed in accordance with the JORC Code 2012 Edition and with internationally-accepted coal industry standards for such reporting. The Report presents an independent, unbiased professional study of the data presented to Behre Dolbear by Geo Energy Resources Limited and BEK Mine management.

Sincerely,



Norris E. Brooks, Qualified Person, MMSA QP Member No. 01404QP
Senior Associate and Project Manager
Behre Dolbear Asia, Inc.

**DECLARATION OF INDEPENDENT QUALIFIED PERSON –
ROBERT E CAMERON, Ph.D.**

With respect to the attached Independent Qualified Person's Report, I, Robert E Cameron, certify that, to the best of my knowledge and belief:

- 1) I am an Independent Qualified Person in accordance with the requirements of the SGX-ST Listing Rules for Mineral, Oil and Gas Companies issued by the Singapore Exchange Securities Trading Limited.
- 2) I have more than 30 years of international experience in the coal industry including coal mines, properties, and facilities that are substantially similar to the coal mines, properties, and facilities described in the attached Report. That experience includes estimation, assessment, and evaluation of coal-bearing properties, coal mine operations, coal preparation plants, and feasibility studies related to such matters.
- 3) I am a registered member of the Mining and Metallurgical Society of America (MMSA), holding Qualified Professional Member No. 01357QP. MMSA is a self-regulatory association of mining industry professionals that:
 - a) admits members on the basis of academic qualifications and experience
 - b) requires compliance with the organization's professional standards of competence
 - c) requires compliance with a code of professional ethics
 - d) has disciplinary powers to suspend or expel a member
- 4) I am responsible for Section 7.0 of the Report. I have not visited or made physical inspections of the properties, facilities, and operations described in the Report.
- 5) I am acting as a Senior Associate of Behre Dolbear Asia, Inc. and I am not a sole practitioner.
- 6) I am personally independent of Geo Energy Resources Limited and BEK Mine management, and their affiliates, shareholders and directors.
- 7) The sole remuneration for my professional services and the services is in the form of hourly fees. My compensation is not dependent upon the attainment of any stipulated result, the occurrence of any subsequent event, or the reporting of any predetermined technical, operational, or financial information that favors Behre Dolbear's client.
- 8) I have no direct or indirect, present or prospective, pecuniary interest in the companies, mines, or properties that are the subject of the Report or in any of the Company's affiliates and subsidiaries, and I will receive no financial benefits other than the above hourly fees for professional services.
- 9) I have not been found in breach of any relevant rule or law and I am not the subject of any disciplinary proceeding. I am not the subject of any investigation that might lead to a disciplinary proceeding by any regulatory authority or any professional association.
- 10) Information in the Report has been obtained from sources believed to be reliable. I considered all reasonably available information that has a bearing on the Report and no facts have been intentionally disregarded.

- 11) The analysis, opinions, and conclusions presented in the attached Report were developed in accordance with the JORC Code 2012 Edition and with internationally-accepted coal industry standards for such reporting. The Report presents an independent, unbiased professional study of the data presented to Behre Dolbear by Geo Energy Resources Limited and BEK Mine management.

Sincerely,



Robert E. Cameron, Ph.D., Qualified Person, MMSA QP Member No. 01357QP
Senior Associate
Behre Dolbear Asia, Inc.

APPENDIX 2.0
JORC 2012 EDITION TABLE 1

IN SUPPORT OF
UPDATE OF JORC RESOURCES AND RESERVES
BUMI ENGGANG KHATULISTIWA COAL MINE PROJECT
EAST KALIMANTAN PROVINCE, INDONESIA
AS OF 31 DECEMBER 2015

TABLE 1
JORC CODE 2012 EDITION GUIDELINES FOR COAL RESOURCE AND
COAL RESERVE ESTIMATION PARAMETERS
RELATIVE TO THE UPDATE OF BEK MINE COAL RESOURCES AND RESERVES

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	Commentary
Sampling Techniques	<p>Cuttings from rotary holes were collected at regular intervals and described by a geologist at the drill site.</p> <p>Cored intervals were sampled by PT Prima Energytama personnel using standard JORC-compliant procedures.</p> <p>These JORC procedures were as follows:</p> <ul style="list-style-type: none"> Any drill mud or other non-in situ material was removed prior to lithological logging and core photography at the drill site. When the lithology logging and photography was completed, appropriate sample intervals were determined at the drill site, by the geologists. Full core for each appropriate sample interval was then placed double wrapped to help preserve the moisture content. Samples taken for analysis were then numbered sequentially using a predetermined sample numbering system set up to ensure the integrity of each individual sample. A 'Sample Submission Sheet' was completed for each drill hole, listing the samples collected, and sent to the lab along with the samples.
Drilling Techniques	Drilling was accomplished using portable drilling rigs capable of drilling NQ-size core (76 mm diameter). Rigs were operated by experienced drillers.
Drill Sample Recovery	<p>For rotary holes, cuttings were described by a geologist in the field and lithologies were reconciled with geophysical logs (gamma, density and caliper). Core holes used for quality determinations were first drilled as a rotary hole, geophysical logs were run to determine the coal intercepts and then the hole was twinned to obtain core of the coal beds.</p> <p>Quality analyses were obtained from coal beds in which core recovery >90%.</p>
Logging	Exploration protocols provided a level of detail sufficient to support mineral resource estimates and mine planning.
Sub-sampling Techniques and Sample Preparation	Samples for analysis were handled in accordance with the standards identified in ISO 5069-1 and 2: 1983.
Quality of Assay Data and Laboratory Tests	Coal quality parameters were analyzed by the PT Geoservices coal laboratory, which is accredited to the standards of ISO 17025.
Verification of Sampling and Assaying	Geophysical logs were used to independently verify coal bed intercepts that were used to estimate coal resources and reserves.
Location of Data Points	The original reserve estimate was based on 226 rotary and 50 core holes, which were surveyed using differential GPS and Total Station (TS). In 2013, 105 additional rotary drill holes were completed. They were located using differential GPS. Elevations for the 105 rotary drill holes were taken from the LIDAR Topographic coverage of the area.
Data spacing and Distribution	Data spacing and distribution are sufficient to establish the degree of geological continuity appropriate for the JORC 2012 Edition classifications reported for this property.
Orientation of Data in Relation to Geological Structure	The coal deposit covered by this Report is a stratified deposit with relatively simple structure, so the drill hole layout has not introduced any materially adverse sample bias.
Sample Security	
Audits or Reviews	Behre Dolbear's independent review of the exploration data and the protocols followed during the drilling in 2012 and 2013 determined that the data presented were adequate to support the reported resource and reserve determinations.

Section 2 of JORC Code Table 1 is not applicable to this Report

<p align="center">TABLE 1 JORC CODE, 2012 EDITION GUIDELINES FOR COAL RESOURCE AND COAL RESERVE ESTIMATION PARAMETERS RELATIVE TO THE UPDATE OF BEK MINE COAL RESOURCES AND RESERVES</p>	
<p align="center">SECTION 3: ESTIMATION AND REPORTING OF COAL RESOURCES</p>	
Criteria	Commentary
Database Integrity	PT Prima Energytama and the Company maintain all applicable data on site and at their offices in Jakarta. Electronic copies of the data were provided to Behre Dolbear for use in the preparation of this Report.
Site Visits	The site was visited by Behre Dolbear in December 2011, as part of Original Report. Initial estimation of JORC-compliant Resources and Reserves was completed in March 2012. A follow-up site visit was made in December 2013 to observe current property status and mining operations and obtain the information necessary to update the JORC Reserve Estimate as of December 2013. Additional site visits were made in December 2014 and December 2015, to observe the properties and operations and to gather data used to assess resources and reserves discussed in this Report.
Geological Interpretation	Three-dimensional geological models were created for the Bumi Enggang Khatulistiwa coal mine project by PT Prima Energytama using Mincom's Minescape® software. In order to assess the validity of the model used by PT Prima Energytama, Behre Dolbear used the Company's drill hole data to create a three-dimensional model of the primary coal bed (G Bed) using Surfer 11.6. The resultant structure, isopach, and overburden maps created for the G Bed confirmed the pit outlines used for the reserve estimates. Behre Dolbear believes that the models developed by PT Energytama adequately represent each pit area based on the outcrop, pit survey, and drilling data that were used.
Dimensions	Drilling within the BEK Mine project area has identified a multi-seam coal resource along a strike length of about 6 kilometers. A number of pit areas have been defined with the upper limit controlled by the topographic surface and the base defined by the minable coal beds.
Estimation and Modelling Techniques	Mincom's Minescape® software was used to model the coal bed thickness, structure, and depth of cover in order to estimate the coal resources within the project area. The drill hole spacing over the project area was originally on a 400 meter × 200 meter grid. In areas where more complex geology was identified, the grid size was reduced to a 200 meter × 200 meter grid, and some areas were drilled on a 100 meter × 100 meter grid. The drill hole spacing is adequate to define the resources and reserves to JORC standards. The modelling software was then used to identify pit areas with an average stripping ratio slightly greater than 6 bank cubic meters of overburden per tonne of coal. The validity of the initial reserve estimates has generally been confirmed by the production to date.
Moisture	Reserve tonnages are based on the average inherent moisture (air dried basis) of 30%.
Cut-off Parameters	No quality cut-off parameters were used.
Mining Factors or Assumptions	No limiting factors were considered in the coal resource estimates. For reserve purposes, the average stripping ratio was limited to 6.18 to 1.
Metallurgical Factors or Assumptions	No coal processing is anticipated and all coal is mined and sold unprocessed.
Environmental Factors or Assumptions	All environmental approvals are reportedly in place to operate the mine. No other considerations are deemed applicable.

TABLE 1 JORC CODE, 2012 EDITION GUIDELINES FOR COAL RESOURCE AND COAL RESERVE ESTIMATION PARAMETERS RELATIVE TO THE UPDATE OF BEK MINE COAL RESOURCES AND RESERVES SECTION 3: ESTIMATION AND REPORTING OF COAL RESOURCES	
Criteria	Commentary
Bulk Density	Coal samples were analyzed by the laboratory and determined to have a weighted average density of 1.31. The analytical densities were used in the resource and reserve estimates for the project.
Classification	For the resource estimates, the coal resources were considered to be Measured when within 150 meters of a data point, Indicated when located between 150 meters and 300 meters of a data point, and Inferred up to 600 meters from the data point.
Audits or Reviews	The initial coal resource estimate and reserve estimate was reviewed by Behre Dolbear as part of an Independent Technical Review Report released in March 2012. After commencement of mining, the reserve estimate was again reviewed and updated to reflect production and additional exploration.
Discussion of Relative Accuracy/Confidence	The Bumi Enggang Khatulistiwa coal mine project has been in operation since 2012 and through the end of 2015 has produced a total of 2.4 million tonnes. A comparison of the coal produced with the original reserves estimated for the project verifies the validity of the original estimates.

TABLE 1 JORC CODE, 2012 EDITION GUIDELINES FOR COAL RESOURCE AND COAL RESERVE ESTIMATION PARAMETERS RELATIVE TO THE UPDATE OF BEK MINE COAL RESOURCES AND RESERVES SECTION 4: ESTIMATION AND REPORTING OF COAL RESERVES	
Criteria	Commentary
Mineral Resource Estimate for Conversion to Ore Reserves	The reported reserves are determined by using models of the coal deposit to identify pit areas with an average stripping ratio not to exceed 6.18 to 1. The reported resources include the reserves.
Site Visits	The author of this Report is a JORC Competent Person. He visited the site on 05 December 2015 and determined that the activities being conducted on site were consistent with reported information.
Study Status	Bumi Enggang Khatulistiwa coal mine project is an operating mine which has produced 2.4 million tonnes through the end of 2015.
Cut-off Parameters	The pit limits are defined from the geologic modelling of coal thickness, structure and overburden and limited to an area with an average stripping ratio of 6.18 to 1.
Mining Factors or Assumptions	The mining method used in determining the coal reserve is conventional open-pit mining using backhoe style hydraulic excavators loading off-highway dump trucks for both waste and mining. Coal is crushed in the pit and transported to a nearby barge loading facility.
Metallurgical Factors or Assumptions	Except for in-pit crushing, there is no processing of the mined coal.
Environmental	All environmental approvals are currently in place to operate the mine.
Infrastructure	Studied in the Original Report – No substantial change
Costs	Studied in the Original Report – No substantial change
Revenue Factors	Studied in the Original Report – No substantial change, except that operations have been temporarily suspended until coal prices re-bound

TABLE 1 JORC CODE, 2012 EDITION GUIDELINES FOR COAL RESOURCE AND COAL RESERVE ESTIMATION PARAMETERS RELATIVE TO THE UPDATE OF BEK MINE COAL RESOURCES AND RESERVES SECTION 4: ESTIMATION AND REPORTING OF COAL RESERVES	
Criteria	Commentary
Market Assessment	Studied in the Original Report – No substantial change
Economic	Studied in the Original Report – No substantial change except that operations have been temporarily suspended until coal prices rebound
Social	Studied in the Original Report – No substantial change
Other	Studied in the Original Report – No substantial change
Classification	Most Measured Resources within the proposed pits have been classified as “Proved Reserves.” Indicated Resources have been classified as “Probable Reserves.” No Inferred Resources have been used in the reserve estimate.
Audits or Reviews	N/A
Discussion of Relative Accuracy/Confidence	Studied in the Original Report – No substantial change

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