



MACHEnergy

Mount Pleasant Operation

A JOINT VENTURE WITH
JODA
Japan Coal Development Australia

Attachment 12

JORC Summary



STATEMENT OF JORC COMPLIANCE

This Reserves Estimate has been prepared by Mr Ben Smedley and confirms estimates of Open Cut Coal reserves as at 31 December 2019 for ML1645 held by MACH Energy Pty Ltd. The reserves estimate presented in this report has been prepared in accordance with the requirements of the 2012 edition of the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code).

Ben Smedley is an employee of Xenith Consulting Pty Ltd and is employed in a full time capacity as Lead Mining Engineer. He has over 25 years of experience in mining in the open cut coal mining industry that is relevant to the style of mineralisation and type of deposit described in the report, and the type of activity involved in the estimation of the coal reserves. Ben Smedley is a Member of the Australasian Institute of Mining and Metallurgy and qualifies as a Competent Person under the JORC Code.

Neither Ben Smedley, nor Xenith Consulting Pty Ltd, has any material interest or entitlement, direct or indirect, in the securities of MACH Energy Pty Ltd or any associated companies. Fees for the preparation of this report are on a time and materials basis only.

Ben Smedley consents to the release of the report, in the form and context in which it appears.

A handwritten signature in blue ink, appearing to read "Ben Smedley".

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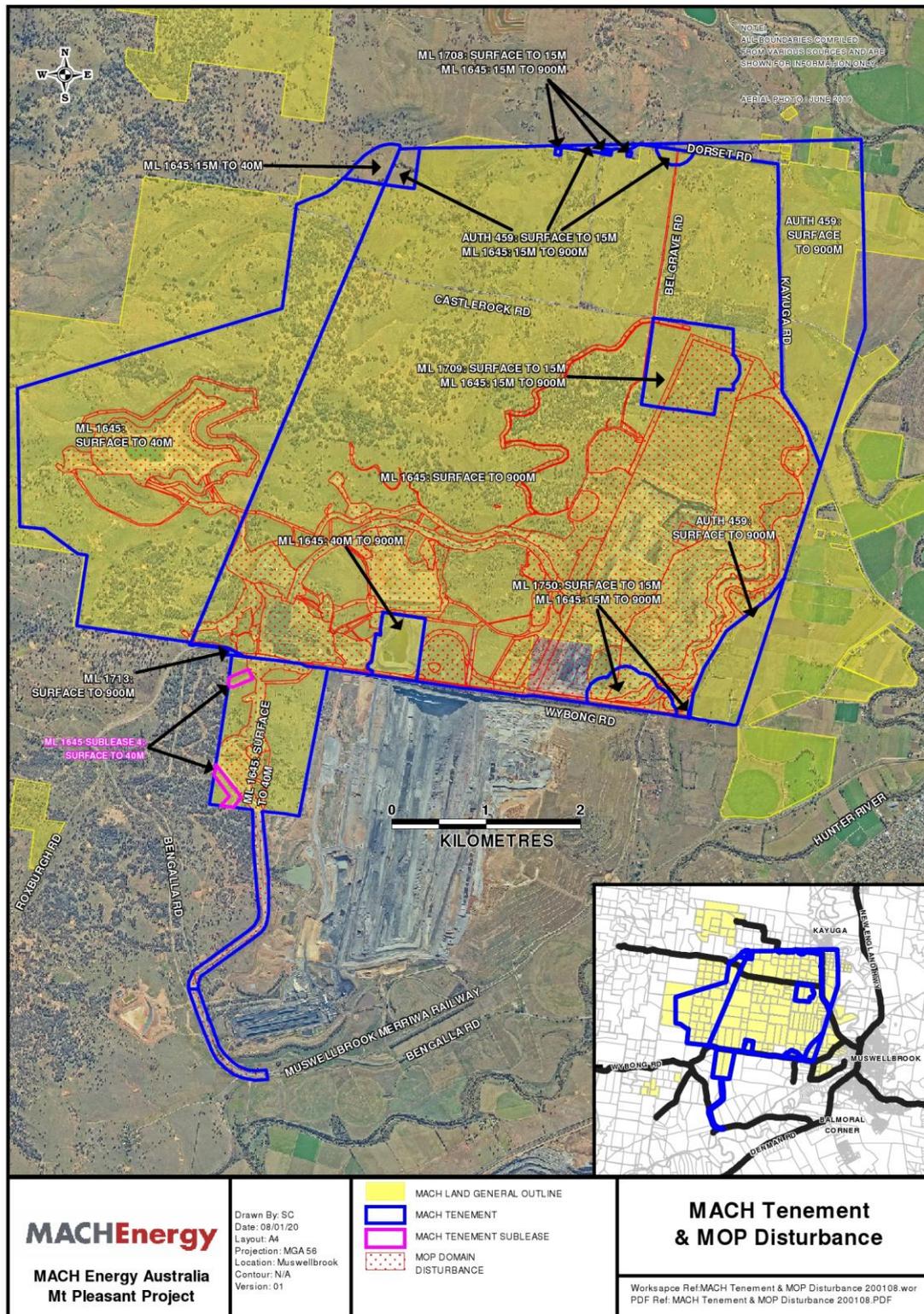


1 EXECUTIVE SUMMARY

This report forms the supporting documentation for the coal reserve estimate, prepared according to “The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, December 2012” (2012 JORC Code), as at 31 December 2019 for ML1645. MACH Energy Australia Pty Ltd (MACH) acquired the land covered in ML1708, ML1709 and ML1750, however these leases only extend to 15m below the surface. All reported reserves exist at depths greater than 15m. MACH also have ML1713 for surface to RL900, however this lease sits outside of the economic pit shell for this coal reserve estimate. ML1645 and the others mentioned above form the Mount Pleasant Operation near Muswellbrook in the upper Hunter Valley, as shown in Figure 1-1



Figure 1-1 – Mining Leases



This JORC Reserves Estimate Report is reliant on the “Mount Pleasant Operation - CP Report Mineral Resources 2019 - FINAL DRAFT.pdf” by Encompass Mining – 31st December 2019. The December 2019 JORC

Resource Estimate describes a total Open Cut Resource of 976Mt and an Underground Resource of 109Mt. The total Open Cut Resource estimated is comprised of:

- 367 Mt of Measured resource,
- 393 Mt of Indicated resource and
- 230 Mt of Inferred resource.

The total Underground Resource estimated is comprised of:

- 16.8 Mt of Measured resource,
- 40.1 Mt of Indicated resource and
- 69 Mt of Inferred resource.

These reserves are a subset of the underlying Open Cut Resource estimate; therefore, the Resources are inclusive of the reserves.

This JORC Reserve Estimate is for open cut reserves only. The mining method is initially based on a terrace mining technique, transitioning to conventional strip mining after 12 years of operation. Waste is removed by a combination of excavators and truck, and dozer operations. The Life of Mine (LOM) schedule, generated to confirm the projects economic viability, targeted an initial 10.5 million ROM tonnes per annum (ROM Mtpa), increasing to 21 ROM Mtpa in year 2034 which is maintained over the project life of 43 years (2020-2062). Coal production begins to decline in the later years from year 2057. The product is an export thermal coal product meeting various ash and energy specifications.

The total open cut ROM coal reserves for the mine are presented in Table 1-1. These reserves have been altered to reflect the impact of the approval of Modification 4 (MOD4) to the Mt Pleasant Development Approval DA 92/97, include the effects of mining losses and dilution, and are on a 9% moisture basis. The coal reserve estimation process has resulted in a increase of the coal reserve tonnage reported in 2018 from 623Mt (ROM) to the 2019 total of 647Mt (ROM). The increase in reserve tonnage is primarily due to;

- A 23Mt increase in Proved and Probable reserves as a result of the new April 2019 Resource model supplied by Encompass Mining.
- Inclusion of Inferred resources in the economic assessment, resulting in an increase of 23Mt of Proved and Probable reserves previously removed in the final years of the project. Only Proved and Probable reserves are reported as Coal Reserves.

Table 1-1 - Total Open Cut ROM Reserves Estimate

Mining Method	Coal Reserves	
	Proved	Probable
	(Mt) (9%ar)	(Mt) (9%ar)
Total Open Cut Coal Reserves	220	427
Total Proved & Probable Coal Reserves	647	

The marketable coal for the mine consists of export specification thermal products. Estimates have been made for the most likely product split of 6000kcal NAR and 5500kcal NAR product types. This has formed the basis of an estimate of Marketable reserves that are derived from the ROM reserve estimates. Therefore, Marketable coal reserves are a sub-set of coal reserves.

All Marketable reserve tonnages have been expressed on an as received product moisture basis of 11%. The product coal ash levels vary according to the product type in a range from 9% to approximately 17% on an air dried basis (adb).

The total Open Cut Marketable coal reserves for the mine are shown in Table 1-2.

Table 1-2 - Total Open Cut Marketable Coal Reserve Estimate Summary

Mining Method	Marketable Coal Reserves	
	Proved	Probable
	(Mt) (11%ar)	(Mt) (11%ar)
Total Open Cut Coal Reserves	148	284
Total Proved & Probable Coal Reserves	432	

