

## MOU for acceleration of gas drainage at the Carborough Downs Mine

### Highlights

- ✓ **Fitzroy Coal Management Pty Ltd (“Fitzroy”) is the operator of the Carborough Downs steel making coal underground mine located within PL 223, one of the Moranbah Project tenements being acquired by QPM Energy Pty Ltd (“QPME”).**
- ✓ **QPME and Fitzroy have entered into a Memorandum of Understanding (“MOU”) where the parties have agreed to work together to accelerate gas drainage of the Carborough Downs Domain 3 mining area.**
- ✓ **The MOU is based on a surface to in seam (“SIS”) well program designed by Fitzroy to target gas drainage well in advance of mining operations. The program is forecast to supply approximately 6.9 PJ of gas to the Moranbah Project’s existing gas gathering infrastructure.**
- ✓ **This MoU with Fitzroy is an excellent example of QPME’s collaborative approach to working with regional coal mine operators to safely and efficiently drain gas ahead of mining, reduce CO<sub>2</sub> emissions and add cost effective gas supplies to the Moranbah Project infrastructure.**

Queensland Pacific Metals Limited (**ASX:QPM**) is pleased to announce the details of a MOU between its wholly owned subsidiary QPME and Fitzroy in relation to a joint waste gas collection program.

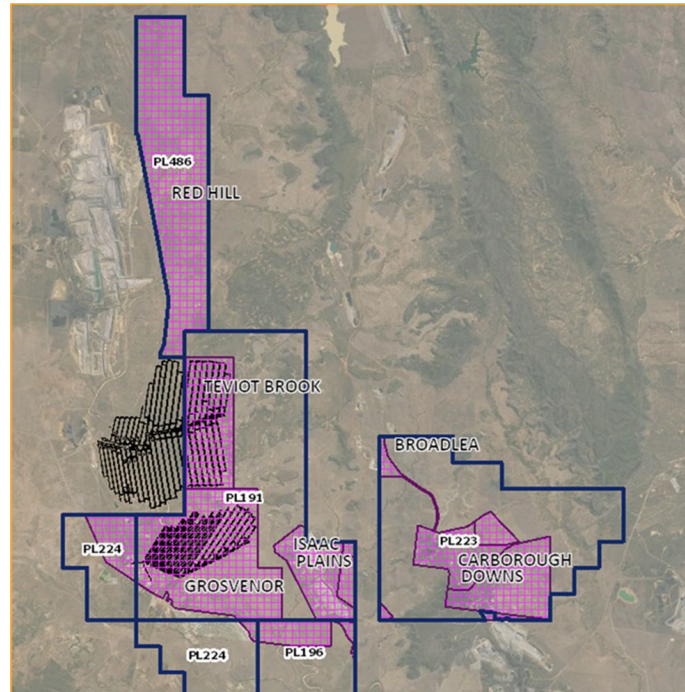
### Background

Fitzroy operates the Carborough Downs steel making coal mine, located in the Northern Bowen Basin. Carborough Downs is an underground mine consisting of mining licenses that are co-located within PL 223 of the Moranbah Project. Gas reserves in the Domain 3 area are included in the Moranbah Project’s certified reserves (see appendix for details).

Fitzroy is seeking to mine the Domain 3 area of Carborough Downs. Ahead of planned mining of the Domain 3 area, Fitzroy must first extensively drain the gas in the coal seam to meet safety and environmental requirements. Typically this gas would be flared, resulting in Scope 1 carbon emissions reportable by the mine operator.

Fitzroy has designed a SIS well drilling program that will be implemented over a 4 year period. Under a base case considering nearby well performance, the program is forecast to recover approximately 6.9 PJ of gas over a 7 year period with an upside case recovery of 8.9 PJ.

Using the existing Moranbah Project gathering and processing infrastructure QPME will deliver the gas to customers and the Townsville Power Station.



*Figure: Moranbah Project tenements with overlapping mining tenure (purple)*

## Memorandum of Understanding

There are existing co-development agreements (“CDA”) governing gas production from Moranbah Project tenure that overlaps Carborough Downs mining leases. QPME and Fitzroy recognise that the CDA is not suitable for some of the commercial initiatives that the parties are interested in implementing.

QPME and Fitzroy have entered into a non-binding MOU to agree to negotiate a supplementary agreement that will govern a joint waste gas drainage and collection for the Domain 3 project. QPME will have all rights to this gas for sale to customers (including the TECH Project) or to send to the Townsville Power Station for electricity generation.

Benefits to Fitzroy include:

- Reductions in CO<sub>2</sub> emissions from lower fugitive gas emissions and flaring;
- Early drainage of gas will result in lower gas levels and a safer mining environment; and
- Reduction in gas drainage costs.

Benefits to QPME include:

- Securing cost effective gas production for the Moranbah Project;
- Facilitating near term increase in production; and
- Better utilisation of Moranbah Project infrastructure capacity.

As part of the Supplementary Agreement, the parties agree that the costs of the SIS well program will be shared equally. To maximise waste gas drainage and collection ahead of mining, QPME and Fitzroy want to start the drilling program as soon as possible and will work towards executing the Supplementary Agreement shortly after QPME reaches financial close on the Moranbah Project acquisition.

The estimated total cost of the SIS wells is approximately \$35m. Additional gas gathering infrastructure to

tie in Domain 3 gas to the existing Moranbah Project infrastructure is estimated to be \$1.5m.

### QPME Carbon Abatement Strategy

The MOU with Fitzroy is an excellent example of QPME's strategy to work with regional coal mines to drain and collect their waste gas to provide cost effective production at the Moranbah Project. Early gas drainage ahead of the mine plan is crucial for maximising gas collection, minimising carbon emissions and improving safety.

QPME is in active discussions with other coal miners and is confident of securing additional gas for the Moranbah Project.

*This announcement has been authorised for release by the Board.*



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**FORWARD LOOKING STATEMENT** Statements & material contained in this ASX Release, particularly those regarding possible or assumed future performance, production levels or rates, commodity prices, resources or potential growth of QPM, industry growth or other trend projections are, or may be, forward looking statements. Such statements relate to future events & expectations and, as such, involve known and unknown risks & uncertainties. Although reasonable care has been taken to ensure facts stated in this Release are accurate and/or that the opinions expressed are fair & reasonable, no reliance can be placed for any purpose whatsoever on the information contained in this document or on its completeness. Actual results & developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors. Nothing in this Release should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

## Appendix – Reserve and Resource Estimates

The estimated proved and probable reserves, evaluated as of 31 March 2022 contained within PLs 191, 196, 223 and 224, referred to as the Moranbah Project, located in the Bowen Basin of Queensland, Australia.

The volumes included in this estimate are attributable to coals in the LH seams from the Rangal Coal Measures and the GU, P, GM, and GL seams from the Moranbah Coal Measures. Economic analysis was performed only to assess economic viability and determine economic limits for the properties, using escalated price and cost parameters outlined in the Economic Parameters paragraphs.

These estimates have been prepared by Benjamin W. Johnson, P. E. 124738, Vice President, Netherland, Sewell & Associates, Inc. (“NSAI”) in accordance with the definitions and guidelines set forth in the 2018 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers (SPE). NSAI is an independent group of petroleum engineers, geologists, geophysicists, and petrophysicists and does not own an interest in the Moranbah Project properties and has not been employed on a contingent basis.

NSAI has consented to the form and context in which the estimated reserves and the supporting information are presented in this announcement.

### Reserves Estimate

Reserves are those quantities of petroleum anticipated to be commercially recoverable from known accumulations by application of development projects from a given date forward under defined conditions. Reserves must be discovered, recoverable, commercial, and remaining as of the evaluation date based on the planned development projects to be applied. Proved reserves are those quantities of oil and gas which, by analysis of engineering and geoscience data, can be estimated with reasonable certainty to be commercially recoverable; probable and possible reserves are those additional reserves that are sequentially less certain to be recovered than proved reserves.

The estimated Moranbah Project gas reserves (100% interest) as of 31 March 2022, are:

	Gross Wellhead Gas Reserves <sup>1</sup>		Gross Sales Gas Reserves <sub>1,2</sub>	
Category/Subclass	(BCF)	(PJ)	(BCF)	(PJ)
Proved Developed Producing	56.4	58.6	54.1	56.3
Proved Developed Non-Producing	5.3	5.5	5.1	5.3
Proved Undeveloped Justified for Development	99.7	103.6	95.7	99.5
<b>Total Proved (1P)</b>	<b>161.4</b>	<b>167.7</b>	<b>154.9</b>	<b>161.0</b>
Probable On Production	27.4	28.5	26.3	27.4
Probable Justified for Development	42.3	43.9	40.6	42.1
<b>Total Proved + Probable (2P)</b>	<b>231.1</b>	<b>240.1</b>	<b>221.9</b>	<b>230.5</b>

*Totals may not add because of rounding.*

<sup>1</sup> Gas is expressed in billions of cubic feet (BCF) at standard temperature and pressure bases and in petajoules (PJ). The energy content of the produced gas is 1.039 PJ per BCF.

<sup>2</sup> Sales gas reserves are after a 4 percent deduction for shrinkage due to system use gas.

### **Economic Parameters**

Gas prices were used only to assess economic viability and determine economic limits for the properties. These estimates have been prepared using gas price parameters based on existing gas contracts and estimates of future gas contract pricing. For sales still in effect at the end of the existing contracts, reserves are scheduled to meet forecast demand. Gas prices are adjusted for energy content and transportation fees.

Costs were used only to assess economic viability and determine economic limits for the properties. Operating costs used in this estimate are based on operating expense records and forecasts provided by the operator of the properties. Operating costs are limited to direct well- and field-level costs and estimates of general and administrative overhead expenses necessary to operate the properties. Operating costs have been divided into field-level costs and per-well costs. Capital costs used in this report are based on budget forecasts and actual costs from recent activity. Capital costs are included as required for new development wells and production equipment.

### **General Information**

The reserves are estimates only and should not be construed as exact quantities. Estimates may increase or decrease as a result of market conditions, future operations, changes in regulations, or actual reservoir performance. In addition to the primary economic assumptions discussed herein, the estimates are based on certain assumptions including, but not limited to, that the properties will be developed consistent with current development plans, that the properties will be operated in a prudent manner, that no government regulations or controls will be put in place that would impact the ability of the interest owner to recover the volumes, and that projections of future production will prove consistent with actual performance. If these volumes are recovered, the revenues therefrom and the costs related thereto could be more or less than the estimated amounts used to assess economic viability and determine economic limits for the properties. Because of governmental policies and uncertainties of supply and demand, the sales rates, prices received, and costs incurred may vary from the assumptions made.

Technical and economic data including, but not limited to, coal properties, gas content and composition data, well logs, geologic maps, well test data, production data, historical price and cost information, and property ownership interests were used to prepare these estimates. The reserves have been estimated using deterministic methods; these estimates have been prepared in accordance with generally accepted petroleum engineering and evaluation principles set forth in the Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the SPE (SPE Standards). Standard engineering and geoscience methods, or a combination of methods, including performance analysis, volumetric analysis, and analogy, are considered to be appropriate and necessary to classify, categorise, and estimate volumes in accordance with the 2018 PRMS definitions and guidelines. A substantial portion of the estimated reserves are for undeveloped locations and producing wells that lack sufficient production history upon which performance-related estimates of reserves can be based. Such volumes are based on estimates of reservoir volumes and recovery efficiencies along with analogy to properties with similar geologic and reservoir characteristics. As in all aspects of oil and gas evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, conclusions necessarily represent only informed professional judgment.

The estimates of Reserves detailed throughout this announcement have been provided by Benjamin W. Johnson of Netherland, Sewell and Associates Inc (“NSAI”) in accordance with the Society of Petroleum

Engineers' Petroleum Resource Management System (SPE-PRMS) guidelines.

Mr Johnson is a full-time employee of NSAI, and is a qualified person as defined under the ASX Listing Rule 5.42. Mr Johnson is a Licensed Professional Engineer in the State of Texas and has consented to the use of the information presented herein.

The technical persons are primarily responsible for preparing the estimates presented herein to meet the requirements regarding qualifications, independence, objectivity, and confidentiality set forth in the SPE Standards.

For further information on the Moranbah Project reserves, please refer to ASX announcement 5 April 2023.