

**Mackay Office**

P.O. Box 1801, Mackay, QLD 4740

 Phone: 07 4999 8512, Fax: 07 49998519

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| **Mine Name**  | **MineID**  | **Operator**  | **Activity Type**  | **Activity Date**  |
| Middlemount Mine  | MI01865  | Middlemount Coal Pty Ltd   | Postal Mine Record Entry  | 21/03/2019  |

***Vision: Our Industries Free of Safety and Health Incidents* Mine Record Entry**

**This report forms part of the Mine Record under s68 of the Coal Mining Safety and Health Act 1999. It must be placed in the Mine Record and displayed on Safety Notice Boards.**

**Note that inspection or audit activities conducted by the Mines Inspectorate are based upon sample techniques. It remains the primary responsibility of Mine Personnel to identify hazards, and risks associated with Operations and ensure those risks are at an acceptable level.**

This Postal Mine Record Entry provides details of a teleconference held between myself, Jacqui

Vinnicombe (Inspector of Mines – Mining/Geotechnical), Mr Darren Cuthbertson (Site Senior

Executive), Mr AAAA (Principal Mining Engineer) and Mr BBBB (Geology

Superintendent - who also holds the primary responsibilities for geotechnical risk management under the Geotechnical PHMP), Mr CCCC (Geotechnical Consultant) and DDDD (Graduate H & S Advisor).

The purpose of the teleconference was for Middlemount Mine to provide an update on progress in addressing 2 open Directives;

1. Ground Control (PHMP - Geotechnical) – issued 27/06/18 by Graham Callinan
2. Geotechnical Model – issued 18/07/18 by J Vinnicombe

Matters discussed included;

# Ground Control

The Principal Hazard Management Plan for Ground Control ie the Geotechnical PHMP has been rewritten and uploaded to the overarching Safety & Health Management (SHMS) and effectively implemented. The Geotechnical PHMP, includes revised TARPs, and a subordinate and more detailed technical document, GCMP (Ground Control Management Plan).

GPL Criteria (version 1) will be completed by EOM March 2019 – it is now used for guidance of all mine design, mine planning and operational plans.

# Geotechnical Model

## Structural Model

* Is now fed into Vulcan and Deswik from mine planning, design and D&B.
* The site uses conventional mapping and photogrammetry methods.
* Mr CCCC advised that there is adequate information for the next strips.
* The Structural Model currently forms part of the GCMP process.

## Geotechnical drilling program

* 13 core holes drilled between Nov 2018 and Mar 2019 and more are planned.
* Physical analysis of core is to be completed by EOM May/June 2019 and EOM July/August 2019 for completion of modelling and interpretation of this information. The hold-up has been a backlog at the lab analysis of the core.

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## Groundwater/hydrological modelling

* 7 installed piezos in core holes – both open stand pipes and VWPs.
* Have started information collection from manual measurement of open standpipes and logging download of piezos (no telemetry to piezos at this stage).
* Hydrological model to be completed by EOM June 2019.
* This information will be provided to Tim Cartledge for inclusion and revision of the GPL criteria.

## Hole Design and Spacing

* The Jorc Code has been used to identify the minimum hole spacing (200x200) for modelling and this tightens up to 25x25/50m in structurally significant areas.

Borehole Wireline

* Borehole wireline logging is also completed.

# Ongoing Geotechnical Risk Management

* Drones are used for highwall mapping and include a point cloud grid for geo referencing.
* The IDS Radar Maptek Sentry Unit is used on site.



# Jacqui Vinnicombe

**Inspector of Mines**

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