HORSE PIT EXTENSION EPBC ACT REFERRAL

APPENDIX F – PART 9 OF 9

Groundwater Impact Assessment Report 2021
Maximum Cumulative Drawdown in Q Seam (Layer 12)

**LEGEND**
- HPE Bore Census (2021) - Water Supply and Stock
- ODS Bore Census (2017) - Water Supply and Stock
- Drawdown Contours (m)
- Major Drainage
- Model Grid
- Project Mining Lease Boundary
- Surrounding Mines
- CVM Horse Pit
- CVM Heyford Pit

**Maximum Drawdown (m)**
- 1 - 2
- 2 - 5
- 5 - 10
- 10 - 20
- 20 - 50
- 50 - 100
- 100 - 200

**Solid Geology**
- K-CQ (Ki)
- Bundarra Granodiorite (Kgb)
- Clematis Group (Re)
- Rewan Group (Rr)
- Rangal Coal Measures,Bandanna Formation,Baralaba Coal Measures (Pwj)
- Fair Hill Formation,Fort Cooper Coal Measures (Pwt)
- Moranbah Coal Measures (Pwb)
- Blackwater Group (Pw)
- German Creek Formation (Pbd)
- Back Creek Group (Pb)

**Model Boundary**

**Project**
- CVM Horse Pit
- CVM Heyford Pit

**Surrounding Mines**

**Major Drainage**

**Model Grid**

**Drawdown Contours (m)**

**Scale:** 1:500,000

**Date:** 25-Aug-2021

**drawing number:** 62013593 F D-5

**FIGURE D-5**

**Description:**
- The map illustrates the maximum cumulative drawdown in the Q Seam (Layer 12) across the study area.
- Various geological formations and mining boundaries are highlighted.
- Contours indicate the depth of drawdown with different color bands for various depth ranges.
- The map also shows the positions of bore census data from different years (HPE, WS, and ODS) to assess water supply and stock changes.

**Key Features:**
- Solid geology layers and formations are color-coded for clarity.
- The project mining lease boundary is outlined with a dashed line.
- Surrounding mines and major drainage lines are also depicted.

**Legend:**
- The legend provides a key to the different symbols and colors used on the map.
- It includes symbols for bore census data from different years and water supply and stock indicators.

**Data Source:**
- ODS Bore Census (2017) - Water Supply and Stock
- HPE Bore Census (2021) - Water Supply and Stock
- ODS Bore Census (2017) - Water Supply and Stock

**Map Scale:**
- 1:500,000

**Date:** 25-Aug-2021

**Drawing Number:** 62013593 F D-5

**Primary Language:** English

**File Reference:**
- File name: Maximum Cumulative Drawdown in Q Seam (Layer 12).mxd
- File format: .mxd

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**Points of Interest:**
- The map provides a detailed view of the geological and mining areas, including significant geological formations and water supply data.
- It is crucial for understanding the impact of mining activities on groundwater levels.
- The data can be used for planning and regulatory purposes to manage groundwater resources effectively.
FIGURE D-6

Maximum Cumulative Drawdown in P Seam (Layer 14)
Maximum Cumulative Drawdown in H Seam (Layer 16)

**Legend**
- **HPE Bore Census (2021)** - Water Supply and Stock
- **WS Bore Census (2019)** - Water Supply and Stock
- **ODS Bore Census (2017)** - Water Supply and Stock
- **Drawdown Contours (m)**
- **Model Grid**
- **Project Mining Lease Boundary**
- **Surrounding Mines**
- **CVM Horse Pit**
- **CVM Heyford Pit**

**Solid Geology**
- **Ki-CQ (Ki)**
- **Bundarra Granodiorite (Kgb)**
- **Clematis Group (Re)**
- **Rewan Group (Rr)**
- **Rangal Coal Measures, Bandanna Formation, Baralaba Coal Measures (Pwj)**
- **Fair Hill Formation, Fort Cooper Coal Measures (Pwt)**
- **Moranbah Coal Measures (Pwb)**
- **Blackwater Group (Pw)**
- **German Creek Formation (Pbd)**
- **Back Creek Group (Pb)**

**Drawdown Contours (m)**
- 1 - 2
- 2 - 5
- 5 - 10
- 10 - 20
- 20 - 50
- 50 - 100
- 100 - 200

**Notes**
- ODS Bore Census (2017) - Water Supply and Stock
- ODS Bore Census (2017) - Water Supply and Stock
Figure D-8

Maximum Cumulative Drawdown in D Seam (Layer 18)

LEGEND
- HPE Bore Census (2021) - Water Supply and Stock
- ODS Bore Census (2017) - Water Supply and Stock

Drawdown Contours (m):
- 1 - 2
- 2 - 5
- 5 - 10
- 10 - 20
- 20 - 50
- 50 - 100
- 100 - 200

Solid Geology:
- Ki-CQ (K)
- Bundarra Granodiorite (Kgb)
- Clematis Group (Re)
- Rewan Group (Rr)
- Rangal Coal Measures, Bandanna Formation, Baralaba Coal Measures (Pwj)
- Fair Hill Formation, Fort Cooper Coal Measures (Pwt)
- Moranbah Coal Measures (Pwb)
- Blackwater Group (Pw)
- German Creek Formation (Pbd)
- Back Creek Group (Pb)

Major Drainage:
- Model Boundary
- Project Mining Lease Boundary
- Surrounding Mines
- CVM Horse Pit
- CVM Heyford Pit
APPENDIX E

Uncertainty Analysis Parameter Distributions
Parameters
Parameters
Parameters
Parameters
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