

# Capability Train Plan

29 July 2022



# **Table of Contents**

ntroduction	3
Deliverable Network Capacity (DNC)	3
Capacity Assessment	4
Appendix 1: Goonyella Corridor Asset Activity (Major Works & Integrated Closures)	10
Appendix 2: Blackwater Corridor Asset Activity (Major Works & Integrated Closures)	14
Appendix 3: Newlands Corridor & GAPE Asset Activity (Major Works & Integrated Closures)	18
Appendix 4: Moura Corridor Asset Activity (Major Works & Integrated Closures)	18
Appendix 5: Modelling Parameters	19
Appendix 6: QR MTP Timetable Traffic	20
Appendix 7: ACAR 2022 % achieved of Committed Capacity	23

#### Introduction

The following Capability Train Plan (**CTP**) report has been provided in accordance with clause 3A of Schedule G of Aurizon Network's Access Undertaking (**UT5 Access Undertaking**) following publication of the Annual Capacity Assessment by the Independent Expert (**IE**) for the period to which it relates.

The Capability Train Plan for each Coal System is to demonstrate that Aurizon Network has sufficient capability to deliver existing Train Services Entitlements (**TSEs**) in each Coal System, having regard to Possessions referred to in clause 3A(c) of Schedule G, Existing Capacity, the System Operating Parameters (**SOPs**) (including any amendments referenced in the most recent Annual Capacity Assessment) and the relevant characteristics of each Coal System.

Unless otherwise defined, capitalised terms used in this document have the meaning given to those terms in the UT5 Access Undertaking.

## **Key Assumptions**

In developing this report, Aurizon Network has made the following key assumptions:

Where possible, the SOPs as developed by the IE, and published on Aurizon Network's website have been used to inform capacity modelling;

The Approved FY23 Maintenance and Renewals Strategy and Budget (**MRSB**) system closure program has been incorporated, along with planned maintenance and renewal activities; and

Full Committed Capacity has been used as the demand, and this demand has been scaled to reflect Deliverable Network Capacity as described in the Initial Capacity Assessment Report.

Where Aurizon Network has used varied assumptions to the SOP, these are detailed in Appendix 5.

## **Deliverable Network Capacity (DNC)**

DNC was determined by the IE as part of the Initial Capacity Assessment Report. It considers all constraints in the rail infrastructure including external factors outside of Aurizon Network's control, such as rollingstock capability, mine and port availability, delays and failures, and the supply chain operating mode.

The DNC that has been calculated by the IE by system, month and year for the required assessment period is shown in Table 1 below. The table values represent the portion of committed Train Paths that are deliverable as reflected in the DNC. Where this value is less than 100%, the DNC representing the capacity of the Rail Infrastructure is not able to meet the Committed Capacity at a Coal System level having regard to the way in which each Coal System operates in practice.

Aurizon Network's contract demand is therefore adjusted in line with the DNC figures in Table 1 and used as the demand input for the subsequent CTP modelling.

As Aurizon Network does not have a copy of the Independent Expert's simulation model, Aurizon Network has recently enhanced the capability of our own Central Queensland Capacity Simulation Model (CQCSM) to reflect the requirements of the definition of DNC under UT5.

Although every effort has been taken by both Aurizon Network and the Independent Expert to reflect the DNC requirements set out in UT5 there are inherent differences in the two models used that have the capacity to yield accurate though varying results. Details of noted model differences are listed in **Appendix 5**.

Table 1 - Deliverable Network Capacity as percentage of contracted demand

	Jul- 22	Aug- 22	Sep- 22	Oct- 22	Nov- 22	Dec- 22	Jan- 23	Feb- 23	Mar- 23	Apr- 23	May- 23	Jun- 23
Newlands & GAPE	66%	64%	51%	66%	64%	70%	70%	67%	58%	66%	60%	70%
GAPE	63%	62%	48%	65%	60%	69%	68%	66%	55%	65%	59%	68%
Goonyella	90%	90%	93%	95%	81%	100%	100%	98%	89%	100%	88%	100%
Blackwater	100%	94%	93%	98%	96%	100%	94%	93%	100%	89%	100%	99%
Moura	98%	97%	100%	100%	100%	90%	100%	99%	100%	81%	100%	100%

# **Capacity Assessment**

The parameters provided were configured in the dynamic simulation and the Capability Train Plan generated using the CQSCM. The following model results reflect the supply chain capability against the DNC adjusted Train Service Entitlements for the period to which it relates for all systems.

The modelling used FY23 contractual demand and maintenance based on the approved FY23 MRSB.

Table 2 - FY23 DNC Adjusted TSE's Achieved

System	DNC TSE	TSE Achieved	Cycle Time	% of DNC TSE Achieved
Newlands & GAPE	9,450	9,450	25h 30m	100%
Goonyella	26,348	26,348	20h 17m	100%
Blackwater	20,258	20,258	30h 29m	100%
Moura	4,614	4,614	21h 57m	100%

#### Newlands & GAPE

With the current maintenance program deployed in the Newlands System, large system closures significantly reduce the throughput achieved in those months where maintenance activity occurs. This means that peaking capacity is available to rail additional trains on clear months, which offset for the months with maintenance. Figure 1 below highlights the impact of maintenance closures on available paths whilst Figure 2 highlights the subsequent impact on TSEs achieved and cycle time. This demonstrates the amount of peaking capacity required to be used on other months.

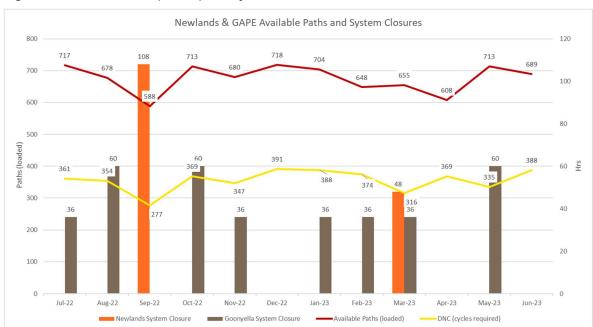
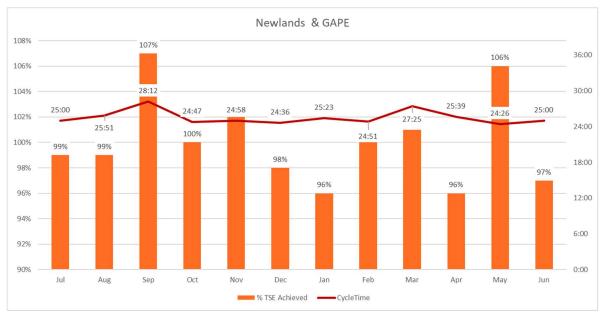


Figure 1 - Available Paths (loaded) and System Closures





#### Notes

The September and March peak is inconsistent with other months results and are reflective of scaling the demand to reflect the DNC. What the modelling is showing is that in September, where Committed Capacity has been scaled by 51% to reflect the DNC, 107% of that scaled Committed Capacity may be

able to be achieved. In the tables in Appendix 7, there is a significant dip in the % achieved of contract for September and this results in the model overachieving the demand. The results from Figure 2 are results from the Central Queensland Coal Supply Chain Model (CQCSM).

The September peak is due to the model achieving the contracted demand that has been scaled down by the % achieved of contract from the ACAR 2022. In the tables in Appendix 7, there is a significant dip in the % achieved of contract for September. This results in the model overachieving the demand.

The May peak in % TSE achieved reflects the modelled impact of the Goonyella System closure on the Newlands System volumes. That is that the Newlands System demand is fulfilled using consist capacity from the GAPE system which would be otherwise stowed during the Goonyella System closure.

## Goonyella

The Goonyella System has a regular pattern of 36hr maintenance closures, with three larger 60hr closures. The system should deliver consistent throughput across most months, and peaking capacity in other months to account for the impact of the larger 60hr closures. Figure 3 and Figure 4 below highlight the impact of maintenance closures on achieving throughput and demonstrates the amount of peaking capacity required to be used on other months.

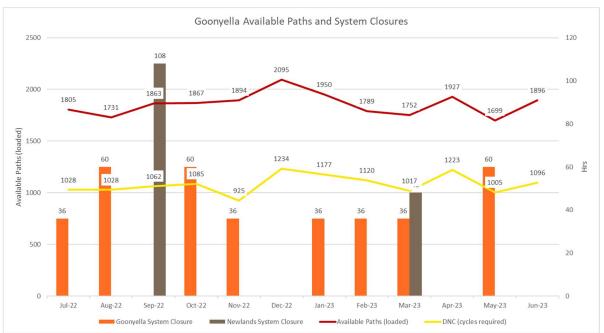
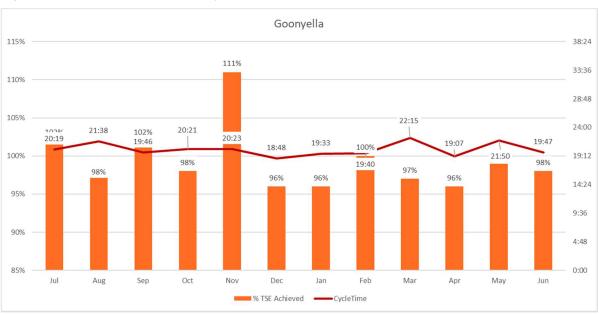


Figure 3 – Available Paths (loaded) and System Closures





The November peak is due to the model achieving the contracted demand that has been scaled down by the % achieved of contract from the ACAR 2022

#### Blackwater

The Blackwater System has a regular pattern of 36hr maintenance closures, with some larger closures. Blackwater system should have sufficient capacity to deliver DNC across most months, and peaking capacity in other months to account for the impact of the larger closures. Figure 5 and Figure 6 below highlight the impact of maintenance closures on achieving throughput and demonstrates the amount of peaking capacity required to be used on other months.

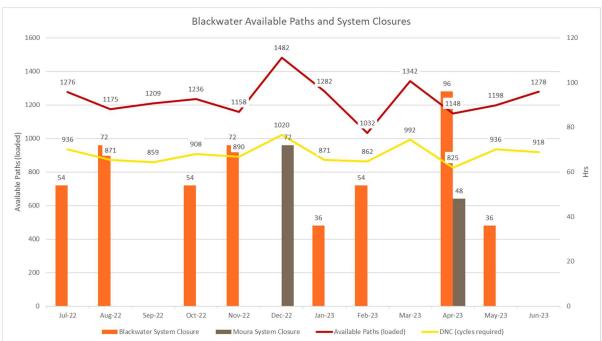
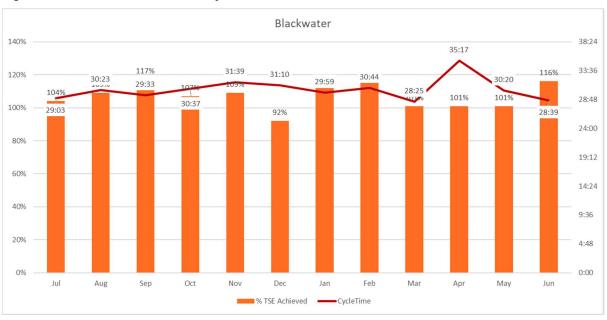


Figure 5 – Available Paths (loaded) and System Closures





#### Moura

The Moura System has only two system closures however the Blackwater System has substantially more. The impact of a large closure in both the Moura and Blackwater systems can been seen in October and subsequent affect it has on both pathing and throughput as shown in Figure 7 and Figure 8 below. Moura systems should have sufficient capacity to deliver DNC across most months, and peaking capacity in other months to account for the impact of the larger closures.

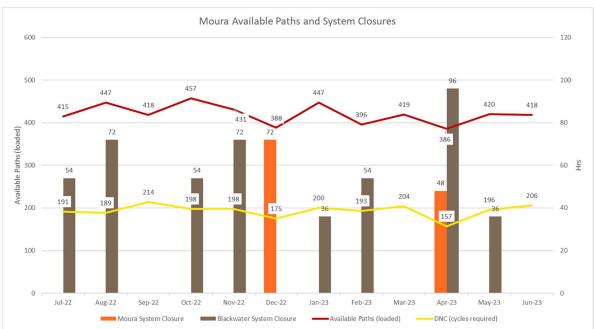
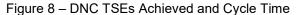
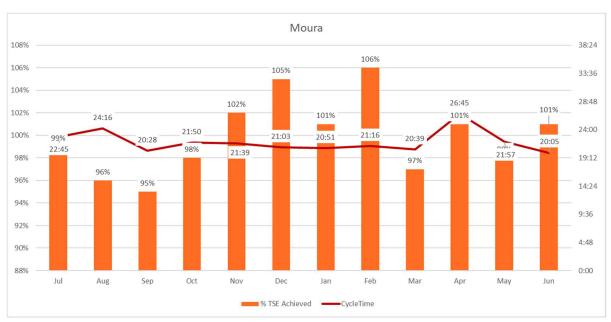


Figure 7 - Available Paths (loaded) and System Closures





The December peak is due to the model achieving the contracted demand that has been scaled down by the % achieved of contract from the ACAR 2022.

The February peak is due to the model achieving the Moura demand while there is a Blackwater closure.

# **Appendix 1: Goonyella Corridor Asset Activity (Major Works & Integrated Closures)**

Asset Activity Start	Asset Activity End	Asset Activity Description	Infrastructure Summary	Duration (hours)	Asset Activity Impact
03/07/2022 06:30	03/07/2022 18:30	GY - AS - TME - WAN - WTA DN - 12.0 hr/s	Wandoo 12A/12B Up Road (86.057) to Wandoo 12C/12D Down Road (86.156) Wandoo 8A/8B Down Road (85.944) to Waitara 9B/9C Down Road (98.248)	12	
04/07/2022 06:30	04/07/2022 18:30	GY - AS - TME - WAN - WTA DN - 12.0 hr/s	Wandoo 12A/12B Up Road (86.057) to Wandoo 12C/12D Down Road (86.156) Wandoo 8A/8B Down Road (85.944) to Waitara 9B/9C Down Road (98.248)	12	
13/07/2022 06:00	14/07/2022 18:00	GY - AS - ICF - GY JULY 36HR IP - 36.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Coppabella 45C/45D Down Road (147.879) Coppabella Angle Western Leg (0.031) to Coppabella Angle Western Leg (0.031) to Coppabella 46A/46B Up Road (1.376) Coppabella ER2C Up Road (144.515) to Coppabella 46A/46B Up Road (147.624) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Jilalan Bypass 7A/7B Up Road (17.347) Dal Bay Xover Pts 9A/9B Down Road (8.329) to Jilalan Bypass 45A/45B Down Road (17.307) German Creek Junction 12A/12B (132.013) to Oaky Creek 7A/7B (148.823) Wotonga 12A/12B Down Road (176.821) to Moranbah North Juntion 7A/7B (192.191) Wotonga Angle 1.354 (0.001) to Wotonga 12A/12B Down Road (176.821)	36	Nil Railings.
14/07/2022 18:00	16/07/2022 06:00	GY - AS - AR-TCC - WTA - BRA UP (POST IC) - 36.0 hr/s	Waitara 11A/11B Up Road (100.593) to Braeside 8C/8D Up Road (107.791)	36	
27/07/2022 06:00	29/07/2022 18:00	GY - AS - ICF - GY JULY 60HR LV NTH BRANCHLINE IP - 60.0 hr/s	Coppabella 94C/94D Up Road (1.046) to Coppabella 12A/12B Up Road (3.897) Coppabella Angle Western Leg (0.031) to Coppabella 94A/94B Down Road (3.796) Lake Vermont Junction North Angle (0.001) to Lake Vermont Junction 7A/7B (0.562) Saraji 12A/12B (67.535) to Lake Vermont Junction 7A/7B (85.697)	60	LV South railings available
29/07/2022 18:00	30/07/2022 12:00	GY - AS - BCM - MVJ - IGD DN (POST IC) - 18.0 hr/s	Ingsdon 7A/7B Up Road (10.772) to Ingsdon 7C/7D Down Road (10.867) Moorvale Junction 8A/8B Down Road (8.053) to Ingsdon 12A/12B (13.237)	18	
06/08/2022 06:30	06/08/2022 18:30	GY - AS - TME - BAL - WAN DN - 12.0 hr/s	Balook 7C/7D Down Road (74.698) to Wandoo 8A/8B Down Road (85.943) Balook ER1A Down Road (74.802) to Balook Dead End Siding (75.053)	12	
07/08/2022 06:30	07/08/2022 18:30	GY - AS - MP - BAL - WAN UP - 12.0 hr/s	Balook Up Road Sig 23 (74.789) to Wandoo 8C/8D Up Road (86.036)	12	
16/08/2022 06:00	17/08/2022 06:00	GY - AS - AR-TCC - BRA - MII DN (PRE IC) - 24.0 hr/s	Braeside 12A/12B Up Road (107.812) to Braeside 12C/12D Down Road (107.911) Braeside 8A/8B Down Road (107.692) to Mindi 12C/12D Down Road (120.560)	24	

17/08/2022 06:00	19/08/2022 18:00	GY - AS - ICF - GY AUG 60HR IP - 60.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Coppabella 45C/45D Down Road (147.879) Coppabella 94C/94D Up Road (1.046) to Coppabella 12A/12B Up Road (3.897) Coppabella 12A/12B Up Road (3.897) Coppabella Angle Western Leg (0.031) to Coppabella PR2C Up Road (2.581) Coppabella ER2C Up Road (144.515) to Coppabella 46A/46B Up Road (147.624) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Praguelands 8C/8D Up Road (14.464) Dal Bay Xover Pts 9A/9B Down Road (8.329) to Praguelands 8A/8B Down Road (14.364) Wotonga Angle 1.354 (0.001) to Moranbah 7A/7B (16.718)	60	LV south available. NGY branch GAP railings available.
19/08/2022 18:00	20/08/2022 18:00	GY - AS - AR-TCC - BRA - MII DN (POST IC) - 24.0 hr/s	Braeside 12A/12B Up Road (107.812) to Braeside 12C/12D Down Road (107.911) Braeside 8A/8B Down Road (107.692) to Mindi 12C/12D Down Road (120.560)	24	
20/09/2022 06:00	23/09/2022 06:00	GY - AS - CM - CDB WEIGHRBIDGE - 72.0 hr/s	Carborough Downs Jct Sig 21 (0.001) to Carborough Downs Mine 8A (4.833)	72	Nil access to CDB.
23/09/2022 06:30	23/09/2022 18:30	GY - AS - TME - TOT - COB UP - 12.0 hr/s	Coppabella 7A/7B Up Road (142.584) to Coppabella 7C/7D Down Road (142.683) Tootoolah 12A/12B Up Road (132.821) to Coppabella 8C/8D Up Road (142.802)	12	
24/09/2022 06:30	24/09/2022 18:30	GY - AS - TME - TOT - COB UP - 12.0 hr/s	Coppabella 7A/7B Up Road (142.584) to Coppabella 7C/7D Down Road (142.683) Tootoolah 12A/12B Up Road (132.821) to Coppabella 8C/8D Up Road (142.802)	12	
29/09/2022 08:30	30/09/2022 14:30	GY - AS - BCM - BBE- BAL DN - 30.0 hr/s	Bolingbroke 12A/12B Up Road (60.528) to Balook 8C/8D Up Road (74.578) Bolingbroke 8A/8B Down Road (60.408) to Balook 7C/7D Down Road (74.698)	30	
02/10/2022 06:00	04/10/2022 18:00	GY - AS - ICF - GY OCT 60HR IP - 60.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Wotonga Down Road (174.185) Coppabella 94C/94D Up Road (1.046) to Wotonga 8C/8D Up Road (173.638) Coppabella Angle Western Leg (0.031) to Coppabella Angle Western Leg (0.031) to Coppabella ER2C Up Road (144.515) to Wotonga 7C/7D Down Road (174.023) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Praguelands 8C/8D Up Road (14.464) Dal Bay Xover Pts 9A/9B Down Road (14.364) North Goonyella Junction 7A/7B (213.578) to North Goonyella Junction Sig 25 (213.828) Peak Downs 12A/12B (45.883) to Harrow 7A/7B (57.549) Wotonga Angle Sig 22 (0.001) to Wotonga Sig 23 Up Road (174.185) Yukan QR 45A (28.430) to Yukan NI05 (916.508) Yukan_Transfer Rd End 28.395 (28.395) to Yukan 49B/49C Up Road (29.780)	60	LV South railings available. Nil GAP railings. NCL unavailable.
04/10/2022 18:00	05/10/2022 18:00	GY - AS - AR-TCC - BAL - WAN DN (POST IC) - 24.0 hr/s	Balook ER1A Down Road (74.802) to Wandoo 8A/8B Down Road (85.943)	24	
07/10/2022 06:30	07/10/2022 18:30	GY - AS - TME - HAT - BBE UP - 12.0 hr/s	Hatfield 11A/11B Up Road (49.875) to Bolingbroke 8C/8D Up Road (60.506)	12	

07/11/2022 06:00	08/11/2022 18:00	GY - AS - ICF - GY NOV 36HR IP - 36.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Coppabella 45C/45D Down Road (147.879) Coppabella 94C/94D Up Road (1.046) to Coppabella 12A/12B Up Road (3.897) Coppabella 12A/12B Up Road (3.897) Coppabella Angle Western Leg (0.031) to Coppabella 92A/92B Up Road (2.581) Coppabella ER2C Up Road (144.515) to Coppabella 46A/46B Up Road (147.624) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Praguelands 8C/8D Up Road (14.464) Dal Bay Xover Pts 9A/9B Down Road (8.329) to Praguelands 8A/8B Down Road (14.364)	36	LV South railings available. BA & NGY branch GAPE railings available.
08/11/2022 18:00	13/11/2022 12:00	GY - AS - AR-TCC - BLA - MAL DN (POST IC) - 114.0 hr/s	Broadlea 7A Down Road (155.938) to Mallawa 7C/7D Down Road (167.900)	114	
15/11/2022 06:00	17/11/2022 18:00	GY - AS - ICF - GY NOV 60HR OCK BRANCHLINE IP - 60.0 hr/s	Gregory Junction 7 Pts (62.090) to Lilyvale 9B/9A Pts (62.545) Harrow 12A/12B (59.900) to Oaky Creek 7A/7B (148.823) Lake Vermont Junction South Angle (0.001) to Lake Vermont Junction 12A/12B (0.562) Oaky Creek 7A/7B (148.824) to Oaky Creek Goonyella Leg (149.202)	60	Harrow to Gregory closed. Gregory South railings available.
17/11/2022 18:00	18/11/2022 06:00	GY, NL - AS - AR-TCC - LVB WEIGHBRIDGE (POST IC) - 12.0 hr/s	Lake Vermont Junction 10A/10B (1.141) to Lake Vermont Balloon Sig 38 (18.583)	12	Nil access to LVB.
11/01/2023 06:00	12/01/2023 18:00	GY - AS - ICF - GY JAN 36HR IP - 36.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Coppabella 45C/45D Down Road (147.879) Coppabella 94C/94D Up Road (1.046) to Coppabella 12A/12B Up Road (3.897) Coppabella 12A/12B Up Road (3.897) Coppabella Angle Western Leg (0.031) to Coppabella 92A/92B Up Road (2.581) Coppabella ER2C Up Road (144.515) to Coppabella 46A/46B Up Road (147.624) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Praguelands 8C/8D Up Road (14.464) Dal Bay Xover Pts 9A/9B Down Road (8.329) to Praguelands 8A/8B Down Road (14.364)	36	LV South railings available. BA & NGY branch GAPE railings available.
10/02/2023 06:30	10/02/2023 18:30	GY - AS - TME - BLA - MAL DN - 12.0 hr/s	Broadlea Down Road (157.107) to Mallawa 7C/7D Down Road (167.900)	12	
11/02/2023 06:30	11/02/2023 18:30	GY - AS - TME - BLA - MAL DN - 12.0 hr/s	Broadlea Down Road (157.107) to Mallawa 7C/7D Down Road (167.900)	12	
12/02/2023 06:30	12/02/2023 18:30	GY - AS - TME - BLA - MAL DN - 12.0 hr/s	Broadlea Down Road (157.107) to Mallawa 7C/7D Down Road (167.900)	12	
22/02/2023 06:00	23/02/2023 18:00	GY - AS - ICF - GY FEB 36HR IP - 36.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Coppabella 45C/45D Down Road (147.879) Coppabella 93A/B Down Road (1.045) to Coppabella 92A/92B Up Road (2.581) Coppabella 94C/94D Up Road (1.046) to Coppabella 12A/12B Up Road (3.897) Coppabella 12A/12B Up Road (3.897) Coppabella ER2C Up Road (144.515) to Coppabella 46A/46B Up Road (147.624) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Praguelands 8C/8D Up Road (14.464) Dal Bay Xover Pts 9A/9B Down Road (8.329) to Praguelands 8A/8B Down Road (14.364) Red Mountain 7A/7B (21.774) to Red Mountain Mainline (22.917) Wotonga 12A/12B Down Road (176.821) to Moranbah North Juntion 7A/7B (192.191) Wotonga Angle 1.354 (0.001) to Wotonga	36	*** OS - LV South railings available. BA & NGY branch GAPE railings available. Closed for OH isolations - will allow diesel railings for these locations. ***
09/03/2023 06:00	11/03/2023 18:00	GY - AS - ICF - GY MAR 60HR BA BRANCHLINE IP - 60.0 hr/s	12A/12B Down Road (176.821) Wotonga Angle 1.354 (0.001) to Moranbah 7A/7B (16.718)	60	Nil railings from BA branchline.

13/03/2023 08:30	14/03/2023 02:30	GY - AS - BCM - HAT - BBE DN - 18.0 hr/s	Hatfield 12A/12B Middle Road (49.776) to Hatfield 12C/12D Down Road (49.925)	18	
15/03/2023 08:30	16/03/2023 14:30	GY - AS - BCM - MII - TOT DN - 30.0 hr/s	Mindi 11A/11B Down Road (120.583) to Tootoolah 12C/12D Down Road (132.923) South Walker Junction 7A/B Pts Up Road (127.249) to Tootoolah 8C/8D Up Road (132.712) South Walker Junction Sig 22 (0.001) to South Walker Junction 9A/9B Pts Down Road (0.260)	30	Nil access to HCB & BYB.
24/03/2023 08:30	25/03/2023 14:30	GY - AS - BCM - JIL BYP - YUK DN - 30.0 hr/s	Jilalan 10C/D (22.815) to Jilalan Bypass 84A/84B Down Road (23.506) Jilalan Bypass 12A/12B Down Road (23.434) to Yukan 7B/7C Down Road (28.785) Yukan 8A/B Down Road (27.687) to Yukan 8C/D Up Road (27.787)	30	
27/03/2023 06:00	28/03/2023 18:00	GY - AS - ICF - GY MAR 36HR IP - 36.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Wotonga 8A/8B Down Road (173.482) Coppabella 93A/B Down Road (1.045) to Coppabella 92A/92B Up Road (2.581) Coppabella 94C/94D Up Road (1.046) to Wotonga 8C/8D Up Road (173.638) Coppabella ER2C Up Road (144.515) to Coppabella 46A/46B Up Road (147.624) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Praguelands 8C/8D Up Road (14.464) Dal Bay Xover Pts 9A/9B Down Road (8.329) to Praguelands 8A/8B Down Road (14.364) North Goonyella Junction 7A/7B (213.578) to North Goonyella Junction Sig 25 (213.828) Wotonga 12A/12B Down Road (176.821) to Moranbah North Juntion 7A/7B (192.191) Wotonga Angle 45A/45B (2.618) to Moranbah 7A/7B (16.718)	36	LV South railings only. Nil GAPE railings.
08/05/2023 18:00	09/05/2023 06:00	GY - AS - AR-TCC - BBE - BAL DN (PRE IC) - 12.0 hr/s	Bolingbroke 12C/12D Down Road (60.627) to Balook 8A/8B Down Road (74.478)	12	
09/05/2023 06:00	11/05/2023 18:00	GY - AS - ICF - GY MAY 60HR IP - 60.0 hr/s	Coppabella 10A/10B Down Road (145.369) to Coppabella 45C/45D Down Road (147.879) Coppabella 94C/94D Up Road (1.046) to Coppabella 12A/12B Up Road (3.897) Coppabella 12A/12B Up Road (3.897) Coppabella 92A/92B Up Road (2.581) Coppabella ER2C Up Road (144.515) to Coppabella ER2C Up Road (144.515) to Coppabella 46A/46B Up Road (147.624) Dal Bay Xover Pts 49A/49B Up Road (8.329) to Praguelands 8C/8D Up Road (14.464) Dal Bay Xover Pts 9A/9B Down Road (8.329) to Praguelands 8A/8B Down Road (14.364)	60	LV South railings available. BA & NGY branch GAPE railings available.
11/05/2023 18:00	13/05/2023 18:00	GY - AS - AR-TCC - BBE - BAL DN (POST IC) - 48.0 hr/s	Bolingbroke 12C/12D Down Road (60.627) to Balook 8A/8B Down Road (74.478)	48	
11/05/2023 18:00	12/05/2023 12:00	GY - AS - CM - BLA - MAL DN (POST IC) - 18.0 hr/s	Broadlea 7A Down Road (155.938) to Mallawa 7C/7D Down Road (167.900)	18	
11/05/2023 18:00	12/05/2023 06:00	GY - AS - AR-TCC - MLJ WEIGHBRIDGE - 12.0 hr/s	Millennium Junction Sig 23 (0.225) to Millennium Balloon 101A (6.615)	12	Nil access to MLB.

# **Appendix 2: Blackwater Corridor Asset Activity (Major Works & Integrated Closures)**

Asset Activity Start	Asset Activity End	Asset Activity Description	Infrastructure Summary	Duration (hours)	Asset Activity Impact
18/07/2022 06:00	20/07/2022 12:00	BW, GY, MA - AS - ICF - BW JULY 54HR NCL & CWL IP - 54.0 hr/s	Burngrove Sig 18 (0.001) to Burngrove 12A/12B (0.360) Callemondah 290 B Down Road (536.285) to Rocklands Sig 18 Down Road (631.941) Gregory Junction 7 Pts (62.090) to Lilyvale 9B/9A Pts (62.545) Parana 8 Pts (522.851) to Rocklands 10A/10B Up Road (631.729) Rocklands 9A/9B Down Road (0.924) to Rocklands Sig 14 Down Road (1.085) Rocklands Sig 13 Up Road (1.093) to Gracemere 12B/12A Up Road (3.922)	54	Moura Traffic operating. Moura Traffic can access RGTCT and QAL. Nil Access Blackwater Mainline. East End - Fish Ldg. available. Rocklands Angle NOT available. Callemondah Provisioning Shed UNAVAILABLE. Powerhouse & all Callemondah arrival Roads unavailable. Nil access Gracemere Tilt Train Facility. Gladstone Platform available for electric tilt services
08/08/2022 06:00	08/08/2022 18:00	BW - AS - AR-TCC - GTI - TNL DN - 12.0 hr/s	Grantleigh 11B/11A Down Road (65.923) to Tunnel 7C/7C Down Road (75.948)	12	
27/08/2022 12:00	30/08/2022 12:00	BW, GY, MA - AS - ICF - BW AUG 72HR NCL & CWL IP - 72.0 hr/s	Callemondah 296 (536.960) to Rocklands Sig 18 Down Road (631.941) Gregory Junction 7 Pts (62.090) to Lilyvale 9B/9A Pts (62.545) Parana 8 Pts (522.851) to Rocklands 10A/10B Up Road (631.729) Rangal 7B/7A Up Road (198.283) to Burngrove 12A/12B (202.282) Rocklands Sig 13 Up Road (1.093) to Gracemere 12B/12A Up Road (3.922) Rocklands Sig 14 Down Road (1.093) to Gracemere 12D/12C Down Road (4.122)	72	Nil access to MA from 1200-2359hrs 27/08/22. Moura Traffic can access RGTCT and QAL beyond 2359 27/08/22. Nil access to Fish Landing. Nil Access Blackwater Mainline. East End - Fish Ldg. available. Rocklands Angle NOT available. All Callemondah arrival Roads unavailable. Nil access Gracemere Tilt Train Facility. Nil access to Gladstone Platform.
30/08/2022 12:00	30/08/2022 23:59	BW - AS - CM - EPA - RGL DN (POST IC) - 11.9 hr/s	Epala 7C/7D Down Road (577.735) to Raglan 12C/12D Down Road (583.979)	11.983	
23/09/2022 07:00	25/09/2022 11:00	BW - AS - CM - BLU - BLP DN - 52.0 hr/s	Bluff 9B/9A Down Road (170.935) to Boonal Balloon Points Down Road Sig 16 (178.755)	52	
24/09/2022 07:00	24/09/2022 19:00	BW - AS - AR-TCC - YAR - MMI UP - 12.0 hr/s	Mt Miller 8C/8D Up Road (542.500) to Yarwun 7A/7B Up Road (550.142)	12	

17/10/2022 06:00	19/10/2022 12:00	BW, GY - AS - ICF - BW OCT 54HR CWL IP - 54.0 hr/s	Gregory Junction 7 Pts (62.090) to Lilyvale 9B/9A Pts (62.545) Rocklands 8C Pts Down Road (0.001) to Gracemere 12D/12C Down Road (4.122) Rocklands_11 (0.001) to Gracemere 12B/12A Up Road (3.922) Rocklands_11 (0.001) to Rocklands Sig 23 Western Loop Up Road (0.765)	54	CWL only closure. NCL closed Monday between tilts. Moura Traffic operating. Moura Traffic can access RGTCT and QAL. Nil access Gracemere Tilt Train Facility. Nil access Powerhouse, 3-5 Arrival Roads.
27/10/2022 06:00	28/10/2022 18:00	BW, GY - AS - ICF - BW OCT BUR BRANCH 36HR IP - 36.0 hr/s	Burngrove Sig 18 (0.001) to Burngrove 12A/12B (0.360) Lilyvale 8B/8A Pts (64.989) to Oaky Creek 8A/8B (77.208)	36	OCB unavailable Nth/Sth from 0600-1200hrs 27/10. Gordonstone and Ensham unavailable during and for 36hrs post closure due to WB upgrade.
27/10/2022 07:00	01/11/2022 07:00	BW - AS - AR-TCC - BRG BALLOON - 120.0 hr/s	Boorgoon 0.076 Junction (0.001) to Boorgoon TLO (4.197)	120	Nil Access Boorgoon Balloon
30/10/2022 08:30	31/10/2022 20:30	BW - AS - BCM - DUA - WAY UP - 36.0 hr/s	Duaringa 7B/7A Up Road (104.894) to Wallaroo 11D/11C Up Road (114.992)	36	
25/11/2022 08:30	26/11/2022 20:30	BW - AS - BCM - WWO - WYC UP - 36.0 hr/s	Wycarbah 12D/12C Up Road (36.210) to Westwood 12B/12A Up Road (45.292)	36	
28/11/2022 08:30	01/12/2022 08:30	BW, GY - AS - ICF - BW NOV 72HR CWL IP - 72.0 hr/s	Lilyvale 8B/8A Pts (64.989) to Oaky Creek 8A/8B (77.208) Rocklands 8C Pts Down Road (0.001) to Gracemere 12D/12C Down Road (4.122) Rocklands_11 (0.001) to Gracemere 12B/12A Up Road (3.922) Rocklands_11 (0.001) to Rocklands Sig 23 Western Loop Up Road (0.765)	72	NCL closed Monday between tilts. Moura Traffic operating. Moura Traffic can access RGTCT and QAL. Nil Access Blackwater Mainline. Nil access Gracemere Tilt Train Facility.
16/01/2023 06:00	17/01/2023 18:00	BW, GY - AS - ICF - BW JAN 36HR CWL IP - 36.0 hr/s	Lilyvale 8B/8A Pts (64.989) to Oaky Creek 8A/8B (77.208) Rocklands 8C Pts Down Road (0.001) to Gracemere 12D/12C Down Road (4.122) Rocklands_11 (0.001) to Rocklands Sig 18 Down Road (632.958) Rocklands_11 (0.001) to Rocklands Sig 23 Western Loop Up Road (0.765)	36	NCL closed Monday between tilts. Moura Traffic operating. Moura Traffic can access RGTCT and QAL. Nil Access Blackwater Mainline. Nil access Gracemere Tilt Train Facility.
28/01/2023 06:00	01/02/2023 12:00	BW, MA - AS - AR-TCC - GLADSTONE YARD MAIN AND LOOP - 102.0 hr/s	Parana 8 Pts (522.851) to Callemondah 292 A (533.179) South Gladstone_170B (527.761) to Gladstone 194 (529.661)	102	Nil access to Gladstone platform and yard. Nil access to/from Freight and Grain sidings. QAL access to/from MSL only.
28/01/2023 06:30	28/01/2023 18:30	BW - AS - TME - EDU - ARO DN - 12.0 hr/s	Edungalba 11B/11A Down Road (84.546) to Aroona 7D/7C Down Road (96.468)	12	·
29/01/2023 06:30	29/01/2023 18:30	BW - AS - TME - EDU - ARO DN - 12.0 hr/s	Edungalba 11B/11A Down Road (84.546) to Aroona 7D/7C Down Road (96.468)	12	
30/01/2023 08:30	30/01/2023 20:30	BW - AS - TME - EDU - ARO DN - 12.0 hr/s	Edungalba 11B/11A Down Road (84.546) to Aroona 7D/7C Down Road (96.468)	12	
05/02/2023 08:30	06/02/2023 14:30	BW - AS - BCM - WAY - TRY DN - 30.0 hr/s	Wallaroo 11B/11A Down Road (114.920) to Tryphinia 12D/12C Down Road (128.372)	30	

08/02/2023 12:00	09/02/2023 23:59	BW - AS - BCM - KAB - WRN DN - 35.9 hr/s	Kabra 108B/A Down Road (20.650) to Warren 7D/7C Down Road (27.539)	35.983	
11/02/2023 08:30	12/02/2023 14:30	BW - AS - BCM - WAY - TRP DN - 30.0 hr/s	Wallaroo 11B/11A Down Road (114.920) to Tryphinia 12D/12C Down Road (128.372)	30	
27/02/2023 06:00	01/03/2023 12:00	BW, GY, MA - AS - ICF - BW FEB 54HR NCL & CWL IP - 54.0 hr/s	Burngrove Sig 18 (0.001) to Burngrove 12A/12B (0.360) Callemondah 296 (536.960) to Mt Miller 12C/12D Down Road (540.191) Lilyvale 8B/8A Pts (64.989) to Oaky Creek 8A/8B (77.208) Parana 8 Pts (522.851) to Mt Miller 12A/12B Up Road (540.291) Rocklands Sig 13 Up Road (1.093) to Gracemere 12B/12A Up Road (3.922) Rocklands Sig 14 Down Road (1.093) to Gracemere 12D/12C Down Road (4.122)	54	Nil access to MA from 0600-1800hrs 27/02/23 Moura Traffic can access RGTCT and QAL beyond 1800 27/02/23. Nil Access Blackwater Mainline. East End - Fish Ldg. available. Rocklands Angle NOT available. Nil access Gracemere Til Train Facility. South access to Gladstone Platform available.
07/04/2023 08:00	11/04/2023 08:00	BW, GY, MA - AS - ICF - BW APR 96HR NCL & CWL IP - 96.0 hr/s	Burngrove Sig 18 (0.001) to Burngrove 12A/12B (0.360) Callemondah 296 (536.960) to Mt Miller 12C/12D Down Road (540.191) Lilyvale 8B/8A Pts (64.989) to Oaky Creek 8A/8B (77.208) Parana 8 Pts (522.851) to Mt Miller 12A/12B Up Road (540.291) Rocklands Sig 13 Up Road (1.093) to Gracemere 12B/12A Up Road (3.922) Rocklands Sig 14 Down Road (1.093) to Gracemere 12D/12C Down Road (4.122)	96	Moura Traffic can acces RGTCT and QAL. Fish landing railings available. Nil Access Blackwater Mainline. Rocklands Angle NOT available. All Callemondah arrival Roads and Powehouse unavailable. Nil access Gracemere Ti Train Facility. Nil access to Gladstone Platform.
22/04/2023 06:00	22/04/2023 18:00	BW - AS - AR-TCC - AOG - MLM UP - 12.0 hr/s	Aldoga Up Road Sig 23 (559.550) to Mt Larcom 11C/11D Up Road (564.711)	12	
29/04/2023 08:30	29/04/2023 20:30	BW - AS - TME - EDU - ARO DN - 12.0 hr/s	Edungalba 11B/11A Down Road (84.546) to Aroona 7D/7C Down Road (96.468)	12	
30/04/2023 07:30	30/04/2023 19:30	BW - AS - TME - EDU - ARO DN - 12.0 hr/s	Edungalba 11B/11A Down Road (84.546) to Aroona 7D/7C Down Road (96.468)	12	
14/05/2023 08:30	15/05/2023 20:30	BW - AS - BCM - WWO - WDH UP - 36.0 hr/s	Westwood 8B/8A Up Road (47.473) to Windah 11D/11C Up Road (55.193)	36	
22/05/2023 06:00	23/05/2023 18:00	BW, GY, MA - AS - ICF - BW MAY 36HR NCL & CWL IP - 36.0 hr/s	Burngrove Sig 18 (0.001) to Burngrove 12A/12B (0.360) Callemondah 296 (536.960) to Mt Miller 12C/12D Down Road (540.191) Lilyvale 8B/8A Pts (64.989) to Oaky Creek 8A/8B (77.208) Parana 8 Pts (522.851) to Mt Miller 12A/12B Up Road (540.291) Rocklands Sig 13 Up Road (1.093) to Gracemere 12B/12A Up Road (3.922) Rocklands Sig 14 Down Road (1.093) to Gracemere 12D/12C Down Road (4.122)	36	Moura Traffic can acces RGTCT and QAL Nil Access Blackwater Mainline. East End - Fish Ldg. not available. Rocklands Angle NOT available. Nil access Gracemere Ti Train Facility. Gladstone Platform available from the south only.

27/05/2023 08:30	28/05/2023 14:30	BW - AS - BCM - WYC - WWO UP - 30.0 hr/s	Wycarbah 11B/11A Up Road (35.991) to Westwood 12B/12A Up Road (45.292)	30	
31/05/2023 06:00	01/06/2023 18:00	BW - AS - AR-TCC - WAY - TRY UP - 36.0 hr/s	Wallaroo 12B/12A Up Road (115.002) to Tryphinia 12B/12A Up Road (128.269)	36	
03/06/2023 06:00	04/06/2023 18:00	BW, MA - AS - AR-TCC - PAR - SGT - 36.0 hr/s	Parana 45B/45A (0.001) to Parana 8 Pts (0.650) Parana NI11 (522.700) to South Gladstone_170B (527.760)	36	Nil access to QR Passenger Platform Restricted access to Passenger and Freight Services
03/06/2023 07:30	05/06/2023 15:30	BW - AS - AR-TCC - WAY - TRY UP - 56.0 hr/s	Wallaroo 12B/12A Up Road (115.002) to Tryphinia 12B/12A Up Road (128.269)	56	
03/06/2023 08:00	06/06/2023 20:00	BW, MA - AS - AR-TCC - GLADSTONE YARD LOOP/MAIN - 84.0 hr/s	Gladstone 181 (528.252) to Callemondah 292 A (533.179) South Gladstone_170A (527.828) to Gladstone 194 (529.661)	84	Nil access to Gladstone platform and yard. Nil access to/from Freight and Grain sidings. QAL access to/from MSL only.

# **Appendix 3: Newlands Corridor & GAPE Asset Activity (Major Works & Integrated Closures)**

Asset Activity Start	Asset Activity End	Asset Activity Description	Infrastructure Summary	Duration (hours)	Asset Activity Impact
12/09/2022 07:00	16/09/2022 19:00	NL - AS - ICF - NLD SEPT 108HR IP - 108.0 hr/s	CRN_9A/9B (145.678) to Newlands Mainline 7A/7B (146.081) CRN_9A/9B (145.678) to Newlands Mainline 7A/7B (146.081) Durroburra Sig 51 (0.201) to Buckley 7A/7B (8.689) Eaglefield Creek 12 Pts (201.909) to Eaglefield Creek 102A (202.608) Kaili 8A/8B Pts (1165.690) to Kaili 7A Pts (1165.848) Kaili Sig 23 (6.680) to Kaili 7A Pts (1165.848) Pring 96B/C (5.592) to Pring 11A/11B (6.317) Suttor Creek 7 Pts (180.883) to Eaglefield Creek 7 Pts (204.111) Yukan QR 45A (28.430) to Yukan NI05 (916.508)	108	Impact to NCL for 60hrs for Kaili turnout renewal.
22/03/2023 07:00	24/03/2023 07:00	NL - AS - ICF - NLD MARCH 48HR IP - 48.0 hr/s	Abbot Point Staging 12B/12A (14.777) to Abbot Point 10B/10A (21.227) CRN_9A/9B (145.678) to Newlands Mainline 7A/7B (146.081) CRN_9A/9B (145.678) to Newlands Mainline 7A/7B (146.081) Eaglefield Creek 12 Pts (201.909) to Eaglefield Creek 7 Pts (204.111) Pring Loop (4.328) to Pring 11A/11B (6.317) Pring Mainline (4.730) to Buckley 7A/7B (8.689) Suttor Creek 7 Pts (180.883) to Eaglefield Creek 7 Pts (204.111) Yukan QR 45A (28.430) to Yukan NI05 (916.508)	48	Nil access to ABT PT Inloader 1. Nil access to ABT PT Inloader 2.

# **Appendix 4: Moura Corridor Asset Activity (Major Works & Integrated Closures)**

Asset Activity Start	Asset Activity End	Asset Activity Description	Infrastructure Summary	Duration (hours)	Asset Activity Impact
06/12/2022 06:00	09/12/2022 06:00	MA - AS - ICF - MA DEC 72HR IP - 72.0 hr/s	Byellee Flyover Line (0.001) to Stowe 12 Pts (24.374)	72	Full System Closure
19/04/2023 06:00	21/04/2023 06:00	MA - AS - ICF - MA APR 48HR IP - 48.0 hr/s	Byellee Flyover Line (0.001) to Stowe 12 Pts (24.374)	48	Full System Closure

# **Appendix 5: Modelling Parameters**

	Capability Train Plan Model Parameter	2022 SOP (CNCC)
SRTs	Current planned SRTs (2021)	March 2022 Aurizon Scheduling SRTs
Loadout Rates	Distribution of load times generated from Aurizon Network weighbridge data	Load rate distribution created from Above Rail operator data for the two-year period from 1 February 2020 to 31 January 2022.
Unload Rates	Distribution of unload times generated from Aurizon Network unload data	Unload rate distribution created from data provided by Coal Terminals and Above Rail operators for the two-year period from 1 February 2020 to 31 January 2022
Delays	Failure occurrence and delay length- based probability data formulated from incident data actuals	Inputs defining faults were developed by fitting distributions describing faults such that the model produced delays in a similar manner to the historical delay data
TSR's	TSR's are applied by month and per track section generated from TSR actual data (CY2020)	TSR's are applied by month and per track section. Distributions generated to fit low, mid and high classifications based on historical data
Demand mode of operation	Even Railings	Even Railings and Campaign Railings
TLO Availability	TLO planned maintenance assumed to occur is system shuts	TLO planned maintenance applied guided by Above Rail operator provided data for the period 1 February 2020 to 31 January 2022
Payloads	Full payloads considered	Full Payloads and light Payloads distribution applied

#### Consist numbers modelled

Consist Type	Operators	CTP Consists	SOP Consists (CNCC)
Blackwater	2	33	41
Moura	1	8	7
Goonyella	4	34	44
Newlands	3	18	18

# **Appendix 6: QR MTP Timetable Traffic**

The tables below contain station arrival times at the entry & exit points of timetabled North Coast Line traffic.

## Northbound

#### Monday

Train no.	6381	Q301	VC71	QR92	82P9
Gladstone		1712	2223		2345
Callemondah	0730	1720	2234		0029
Rocklands	1007	1825	2352	1920	0205
Gracemere				1940	

#### Tuesday

Train no.	8CP1	YC49	6381	Y279	82P5	YU55	6WC3	Q301	82P9	VC73	Q311	QR92
Gladstone								1712	2030	2223	2317	
Callemondah	0515	0642	0730	1045	1230	1253	1440	1720	2114	2234	2326	
Rocklands	0650	0818	1007	1218	1405	1448	1633	1825	2250	2352	0022	
Rocklands							1959					1920
Gracemere							2008					1940
Nogoa							0045					

#### Wednesday

Train no.	PW57	8CP1	YC49	Y375	Y279	82P5	YU55	82P9	VC75	62N7	6381
Gladstone	0236							2030	2223		
Callemondah	0254	0515	0645	0737	1100	1230	1300	2114	2234	2200	0730
Rocklands	0410	0650	0818	0918	1233	1405	1448	2250	2352	2333	1007
Rocklands	0450										
Nogoa	0905										

#### Thursday

Train no.	8CP1	YC49	6381	YU45	Y279	82P5	YU55	Q301	QR92	82P9	6BC3
Gladstone								1712		2030	
Callemondah	0501	0609	0730	1029	1045	1230	1315	1720		2114	2136
Rocklands	0650	0803	1007	1201	1218	1405	1448	1825	1920	2250	2319
Gracemere									1940		0238
Nogoa											0715

#### Friday

Train no.	8CP1	YC49	6381	Y375	Y279	82P5	YU55	Q301	82P9	VC79	6BC6	QR92
Gladstone								1712	2030	2223		
Callemondah	0515	0630	0730	0744	1045	1230	1254	1720	2114	2234		
Rocklands	0650	0803	1007	0918	1218	1405	1448	1825	2250	2352	2044	1920
Gracemere											2053	1940
Nogoa											0130	

#### Saturday

Train no.	8CP1	YC49	Y279	62N7	7Q39	Q301	QR92	VC81	PW57
Gladstone						1712		2223	2259
Callemondah	0510	0626	1115	1330	1956	1720		2234	2317
Rocklands	0650	0803	1250	1503	2220	1825	1920	2352	0033
Gracemere							1940		0135
Nogoa									0527

## Sunday

Train no.	82P9	8CP1	Y375	YC77	6W46	82P3	YU45	6WC3	Q301	82P7	QR92	YU55	8UP9	6EC1	Y279	Q311
Gladstone									1712				2030			2317
Callemondah	0113	0258	0344	0414		1445	1542	1630	1720	1659		1830	2114	2128	2229	2326
Rocklands	0250	0435	0518	0548		1620	1718	1803	1825	1905		2003	2250	2318	0003	0022
Rocklands					1514						1920			0229		
Gracemere					1523						1940			0238		
Nogoa					2015									0715		

## Southbound

## Monday

Train no.	V980	87P6	Q992	8G08	Y874	Y776	87P0	P985	QJ93	87P8
Nogoa								1938		
Gracemere								0000	0148	
Rocklands	0045	0206	0716	1106	2026	2106	2226	0127	0157	0406
Callemondah	0156	0345	0821	1345	2205	2245	0005	0251	0254	0545
Gladstone	0202	0430	0826				0045	0258	0259	0630

## Tuesday

Train no.	V982	65N0	Q992	87P4	Y796	8G08	87P2	6391	Y798	Q303	87P6
Nogoa								0640			
Gracemere								1208		0607	
Rocklands	0045	0426	0716	0246	1006	1106	1142	1217	1318		1558
Callemondah	0156	0605	0821	0425	1145	1345	1325		1505		1745
Gladstone	0202		0826								1755

## Wednesday

Train no.	Y844	Q992	87P4	65C1	Y796	8G08	87P2	Y798	87P8	Y874	Y776
Nogoa				0425							
Rocklands				0957							
Rocklands	0103	0716	0343	1123	1006	1106	1142	1403	1646	2026	2106
Callemondah	0245	0821	0525	1305	1145	1345	1325	1545	1825	2205	2245
Gladstone		0826									_

### Thursday

Train no.	V972	Q303	Q992	87P4	Y796	8G08	87P2	Y798	87P6	Y776	65N0	P985
Nogoa												1938
Gracemere		0607										0000
Rocklands		0614										0009
Rocklands	0045		0716	0443	1006	1106	1142	1403	1646	2106	2214	0127
Callemondah	0156		0821	0625	1145	1345	1325	1545	1825	2245	0005	0251
Gladstone	0202		0826									0258

## Friday

Train no.	V974	Q992	6YC1	87P4	Y796	8G08	87P2	Y798	87P6	65C5	Y874	Y776	65C3
Nogoa			0325							1435			1910
Gracemere			0848							1948			0028
Rocklands			0857							1957			0040
Rocklands	0045	0716		0828	1006	1106	1142-46	1403	1646	2125	2026	2106	0201
Callemondah	0156	0821		1045	1145	1345	1325	1545	1825	2305	2205	2245	0345
Gladstone	0202	0826											

## Saturday

Train no.	Y844	V976	Q303	Q992	87P4	Y796	87P2	Y798
Gracemere			0607					
Rocklands	0123	0045	0614	0716	0803	1006	1142	1318
Callemondah	0305	0156		0821	0945	1145	1325	1505
Gladstone		0202		0826				

#### Sunday

Train no.	Y776	Q303	Q992	87P4	Y796	Y798	87P2	65C3
Nogoa								1640
Gracemere		0607						2208
Rocklands		0614						2217
Rocklands	0446		0716	0747	1026	1318	2206	2343
Callemondah	0625		0821	0945	1205	1505	2345	0125
Gladstone			0826					

# **Appendix 7: ACAR 2022 % achieved of Committed Capacity**

The tables below contain the DNC % achieved of Committed Capacity by mainline and branch lines as

#### Newlands - ACAR 2022

FY2	FY23 - % Achieved Newlands Coal System		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Nev			64%	51%	66%	64%	70%	70%	67%	58%	66%	60%	70%	64%
1	M.L Collinsville to Pring	66%	64%	51%	66%	64%	70%	70%	67%	58%	66%	60%	70%	64%
1A	B.L Pring to Abbot Point	66%	64%	51%	66%	64%	70%	70%	67%	58%	66%	60%	70%	64%
1B	B.L Newlands Mine to Collinsville	66%	64%	51%	66%	64%	70%	70%	67%	58%	66%	60%	70%	64%

Note: Significant reductions in the % of achieved Committed Capacity in September and March

#### Goonyella ACAR 2022

FY2	3 - % Achieved	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Goo	nyella Coal System	90%	90%	93%	95%	81%	108%	103%	98%	89%	107%	88%	102%	95%
3	M.L Coppabella to Jilalan	90%	90%	93%	95%	81%	108%	103%	98%	89%	107%	88%	102%	95%
ЗА	B.L Jilalan to Port of Hay Point	90%	90%	93%	95%	81%	108%	103%	98%	89%	107%	88%	102%	95%
3B	B.L Hail Creek Mine to South Walker Creek Junction	106%	95%	108%	110%	92%	115%	111%	110%	106%	113%	104%	113%	106%
3C	B.L Oaky Creek Junction to Coppabella	84%	88%	89%	89%	77%	104%	99%	94%	84%	104%	83%	99%	91%
3D	B.L Coppabella to Wotonga	90%	92%	93%	96%	81%	110%	104%	99%	90%	107%	88%	102%	96%
3E	B.L Wotonga to North Goonyella	95%	98%	97%	101%	85%	116%	111%	104%	97%	114%	93%	108%	101%
3F	B.L Blair Athol Mine to Wotonga	87%	89%	93%	92%	80%	106%	99%	95%	87%	103%	85%	97%	93%

Note: Significant reductions in the % of achieved Committed Capacity in November

#### Blackwater ACAR 2022

FY2	3 - % Achieved	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Blac	kwater Coal System	101%	94%	93%	98%	96%	110%	94%	93%	107%	89%	101%	99%	98%
4	M.L Bluff to Callemondah	101%	94%	93%	98%	96%	110%	94%	93%	107%	89%	101%	99%	97%
4A	B.L Callemondah to Port of Gladstone	100%	94%	92%	97%	95%	110%	93%	92%	105%	87%	101%	99%	96%
48	B.L Burngrove to Bluff	101%	94%	93%	98%	96%	110%	94%	93%	107%	89%	101%	99%	97%
4C	B.L Rolleston Mine to Rangal	101%	95%	93%	98%	97%	110%	93%	93%	105%	89%	101%	99%	97%
4D	B.L Oaky Creek Junction to Burngrove	100%	93%	92%	97%	92%	111%	94%	93%	108%	89%	103%	99%	97%
4E	B.L Minerva Mine to Burngrove													
3	M.L Coppabella to Jilalan	100%	90%	90%	100%	90%	110%							97%
38	B.L Hail Creek Mine to South Walker Creek Junction	100%	90%	90%	100%	90%	110%							97%
30	B.L Oaky Creek Junction to Coppabella	97%	92%	90%	96%	91%	109%	91%	88%	104%	88%	99%	98%	95%

Note: Significant reductions in the % of achieved Committed Capacity in August, September, February

#### Moura ACAR 2022

FY2	FY23 - % Achieved of Contract		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Mo	ura Coal System	98%	97%	110%	102%	102%	90%	103%	99%	105%	81%	101%	106%	99%
5	M.L Dumgree to Callemondah	98%	97%	110%	102%	102%	90%	103%	99%	105%	81%	101%	106%	99%
5A	B.L Earlsfield to Dumgree	98%	97%	110%	102%	102%	90%	103%	99%	105%	81%	101%	106%	99%
5B	B.L Earlsfield to Callide	91%	88%	102%	97%	93%	76%	100%	94%	103%	70%	90%	100%	91%
5C	B.L Earlsfield to Moura	97%	96%	111%	100%	103%	89%	99%	98%	102%	78%	102%	106%	98%
4A	B.L Callemondah to Port of Gladstone	98%	97%	110%	102%	102%	90%	103%	99%	105%	81%	101%	106%	99%

Note: Significant reductions in the % of achieved Committed Capacity in December and April