

# Weekly Site Report

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BLACK ROCK WEEKLY REPORT

Weekly PSD Report  
EPIROC SA

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## Weekly Service Report – Black Rock Mine Operations

<b>Report type:</b>	Weekly	<b>Submitted to:</b>	Sello Taku and Sipho
<b>Week Date:</b>	28 Augustus 2025	<b>End Date</b>	03 September 2025
<b>Reported By:</b>	Philip Moller		
<b>BEV:</b>			
<b>Service Tech:</b>	Ivan Phiri	<b>Service Tech:</b>	Lukas Serumola
<b>Service Tech:</b>	Patricia Mazinyo	<b>Service Tech Assistant:</b>	Patrick Yoko
<b>Specialist:</b>	Frikkie van der Walt		
<b>Field Service:</b>			
<b>Service Tech:</b>	Alpheus Mareke	<b>Service Tech:</b>	Mathews Mosemane
<b>CAS Project:</b>			
<b>Team Leader:</b>	Bradley Nast	<b>Service Tech:</b>	Phineas Sibanda
<b>Service Tech:</b>	Julius Manamela	<b>Service Tech:</b>	Joseph Mampa
<b>Certiq Project:</b>			
<b>Team Leader:</b>	Segunda Fernando	<b>Service Tech:</b>	
<b>Mobilaris:</b>			
<b>Team Leader:</b>	Rupert Grobler		

### Report Summary

#### General Summary

The purpose of this report is to give an overview of all the Epiroc activities at Blackrock Mine Operations (BRMO).

#### BEV - Critical Issues Summary

- Buckets of ST14 machines in poor condition. Audit done, waiting on a report.
- Critical spares list review process started. Waiting on response from BR for a meeting date.

- DT150 – Long standing times because of support equipment and tools needed to do the job.

### CAS L9 Implementation - Critical Issues Summary

- All fleet in NCH3 is currently operating on CAS level 9.

### Certiq & Mobilaris - Critical Issues Summary

- Machine availability to review the installation and collect evidence for the commissioning documents
- CAS level 9 trainings to be completed.

### BEV – MH4.0 Upgrades

- MH4.0 software upgrades project update to be sent for approval.

### Passport 360 Compliance

- BEV Technicians: **96%**
- CASL9 (Gloria): **98%**
- CASL9 (Nch2): **97%**
- CAS L9 (Nch3): **97%**
- Certiq & Mobilaris N2: **97%**
- Certiq & Mobilaris Gloria: **98%**
- Epiroc SLA: **84% - Contract stopped. Pack to be archived**

## BEV Report

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### Weekly machine utilization summary:

*Thursday 28 August 2025:*

1. FL 98 -
2. FL 99 -
3. FL 107 - Night shift: Electrical breakdown – No feedback.
4. FL 108 - Night shift: Electrical breakdown - The female pins on X10:1 is faulty and causing the Main battery loose 24v, so we need to replace the harness. Temporarily fixed harness. (4D20H34min)
5. FL 112 - Night shift: Aircon fault – No feedback. (1H01min)
6. FL 113 -
7. DT 146 -
8. DT 147 -
9. DT 149 - Afternoon shift: Electrical breakdown - Monitor and camera is fitted and the wire is routed inside the cab behind the dashboard. Will connect the wiring tomorrow.
10. **DT 150 - Ongoing breakdown: Waiting tools. Don't have the right tool to tighten suspension cylinder nut.**
11. DT 162 - Morning shift: #rd party supplier – Strata (2H53min)
12. DT 163 -

13. DT 171 –

*Friday 29 August 2025:*

1. FL 98 -
2. FL 99 -
3. FL 107 -
4. FL 108 -
5. FL 112 -
6. FL 113 -
7. DT 146 -
8. DT 147 - Night shift: 3<sup>rd</sup> party supplier: Strata (46min)
9. DT 149 -
- 10. DT 150 - Ongoing breakdown: Waiting tools. Don't have the right tool to tighten suspension cylinder nut.**
11. DT 162 -
12. DT 163 -
13. DT 171 –

*Saturday 30 August 2025:*

1. FL 98 -
2. FL 99 -
3. FL 107 -
4. FL 108 -
5. FL 112 -
6. FL 113 -
7. DT 146 -
8. DT 147 -
9. DT 149 -
- 10. DT 150 - Ongoing breakdown: Waiting tools. Don't have the right tool to tighten suspension cylinder nut.**
11. DT 162 -
12. DT 163 -
13. DT 171 –

*Sunday 31 August 2025:*

1. FL 98 -
2. FL 99 -
3. FL 107 -
4. FL 108 -
5. FL 112 -
6. FL 113 -
7. DT 146 -
8. DT 147 -
9. DT 149 -
- 10. DT 150 - Ongoing breakdown: Waiting tools. Don't have the right tool to tighten suspension cylinder nut.**

- 11. DT 162 -
- 12. DT 163 -
- 13. DT 171 –

### *Monday 01 September 2025:*

- 1. FL 98 -
- 2. FL 99 -
- 3. FL 107 -
- 4. FL 108 -
- 5. FL 112 - Night shift: Aircon fault – Changed aircon pump **(03D07H48min)**
- 6. FL 113 -
- 7. DT 146 -
- 8. DT 147 -
- 9. DT 149 -
- 10. **DT 150 - Ongoing breakdown: Waiting tools. Don't have the right tool to tighten suspension cylinder nut.**
- 11. DT 162 -
- 12. DT 163 -
- 13. DT 171 –

### *Tuesday 02 September 2025:*

- 1. FL 98 - Afternoon shift: Mechanical breakdown – No feedback. (30min)
- 2. FL 99 -
- 3. FL 107 -
- 4. FL 108 -
- 5. FL 112 -
- 6. FL 113 -
- 7. DT 146 -
- 8. DT 147 -
- 9. DT 149 -
- 10. **DT 150 - Ongoing breakdown: Waiting tools. Don't have the right tool to tighten suspension cylinder nut.**
- 11. DT 162 -
- 12. DT 163 -
- 13. DT 171 – Morning shift: Mechanical breakdown - D510 Module Sensor Voltage Error X12 on machine short circuit cable needs to be checked where it is damaged or shaved it goes to the bucket down proxy. **(22H41min)**

### *Wednesday 03 September 2025:*

- 1. FL 98 -
- 2. FL 99 -
- 3. FL 107 -
- 4. FL 108 - Morning shift: Mechanical breakdown – No feedback. (1H14min)  
Morning shift: 3<sup>rd</sup> party supplier – Strata. (48min)
- 5. FL 112 - Morning shift: Mechanical breakdown – Boilermaker repaired light bracket. (44min)
- 6. FL 113 – Afternoon shift: Electrical breakdown – Reset BMS error. (43min)
- 7. DT 146 -
- 8. DT 147 - Afternoon shift: Mechanical breakdown – Battery not connecting. Changed battery. (49min)

9. DT 149 -

10. **DT 150 - Ongoing breakdown: Waiting tools. Don't have the right tool to tighten suspension cylinder nut.**

11. DT 162 -

12. DT 163 - Night shift: 3<sup>rd</sup> party supplier – Strata **(Ongoing breakdown) (9H46min)**

13. DT 171 – Afternoon shift: Auto electrical breakdown – Pin for high voltage plug stuck inside. Pulled out pin. **(8H46min)**

### Planned work for the coming week:

- Onboarding of artisans to assist with the DC/DC campaign.

### SERVICES:

Maintenance Schedule Sept 2025				
Monday	Tuesday	Wednesday	Thursday	Friday
8-Sep-25	9-Sep-25	10-Sep-25	11-Sep-25	12-Sep-25
DT0131	DT0160	DT0147		
FL0103	FL0098	FL0090	FL0080	

## Battery and Charger Status Report

### General summary

#### ST14 – B4 battery packs

- We currently have 10 x ST14 – B4 battery packs and 6 x ST14 machines operational underground. This is equal to the committed ratio of 1.6 batteries per machine.

#### MT42 – B5 battery packs

- We currently have 12 x MT42 – B5 battery packs operational underground. This is above the committed ratio of 1.6 batteries per machine.

#### 160 kW Chargers

- Charger 4 Module 1 is removed. Module is faulty and needs to be replace.
- Charger 5 Module 4 is removed. Module is faulty and needs to be replace.
- Charger 7 one Module is switch off. It trips mini sub braker when it is switch on.
- Charger 8 one Module is switch off. It trips mini sub braker when it is switch on.
- Post 3,6 and 7 CCS connector cables need to be replaced.

### General

- Damage audits have been completed on battery packs, communication for repairs and battery upkeep was sent to BRMO with the respective quotations to ensure adequate battery upkeep.
- There are more noted charger stops; this is being investigated with initial indications being worn out charger and CCS battery inlet connectors. DCDC campaign to kick off once technicians are onboarded.

Table 1: Battery pack availability for week 2025

Battery Type	Battery ID	Status	Comment
B4 - ST14	VPY-00011	Working	
B4 - ST14	VPY-00031	Breakdown	TMS will be replaced by a new one. Waiting TMS
B4 - ST14	VPY-00051	Working	
B4 - ST14	VPY-00048	Working	
B4 - ST14	VPY-00049	Working	
B4 - ST14	VPY-00088	Working	
B4 - ST14	VPY-00086	Working	
B4 - ST14	VPY-00076	Working	
B4 - ST14	VPY-00083	Working	
B4 - ST14	VPY-00041	Working	
B5 - MT42	VPX-00016	Working	
B5 - MT42	VPX-00015	Surface	Battery on surface. Waiting to go down.
B5 - MT42	VPX-00023	Working	
B5 - MT42	VPX-00017	Working	
B5 - MT42	VPX-00010	Working	
B5 - MT42	VPX-00050	Working	
B5 - MT42	VPX-00031	Working	
B5 - MT42	VPX-00036	Working	
B5 - MT42	VPX-00028	Working	
B5 - MT42	VPX-00026	Working	
B5 - MT42	VPX-00024	Working	
B5 - MT42	VPX-00048	Working	
B5 - MT42	VPX-00044	Surface	On machine: 8997901500



Field Service on site:

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## CAS Report Summary

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<b>Report Type:</b>	Weekly	<b>Project Leader:</b>	Hennie van Niekerk
<b>Start Date:</b>	06-Aug-2025	<b>Report By:</b>	Bradley Nast
<b>End Date:</b>	13-Aug-2025	<b>Contract No:</b>	BPE145D

### Critical Issues

1. Request received to delay L9 switch-on and software standardization until BRMO financial year end conclusion.
2. Team will continue with software standardization in the interim.

### Progress Update

1. All machine installations/up at NCH2 have been completed.
2. Team aims to upgrade software on various machines to ensure conformity etc, to be planned.
3. Status updates etc. to be distributed in due course.

## Certiq & Mobilaris Report Summary

### General summary

NCH 2 and Gloria are in the project phase. Installations are complete and commissioning is in progress. NCH3 is on a support contract, However the contract has lapsed.

#### NCH2:

25 machines scoped for the smart enablement project:

- 3 Machines are scrapped
- 4 Machines are routing for signature by the Black Rock project team,
- 6 Machines are complete, and Commissioning documents are signed.
- 2 machines work in a section with no Wi-Fi. Can't test and commission. Issue raised with Wayne
- 1 Machine not in use. Reason not clear.
- 10 machines are under investigations.

#### Gloria:

13 machines scoped for the smart enablement project:

- 3 machines completed and commissioned.
- 8 machines under investigations.

- 2 machines, ECU not giving out date. It was report to Black Rock. Replacement is expected.

**NCH3:**

1. **Support contract expired.**

Support contract to be reviewed before S2 optimisation project kicks off.