

Weekly Site Report

BLACK ROCK WEEKLY REPORT

Weekly PSD Report
EPIROC SA

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Weekly Service Report – Black Rock Mine Operations

Report type:	Weekly	Submitted to:	Sello Taku and Sipho
Week Date:	14 Augustus 2025	End Date	20 Augustus 2025
Reported By:	Philip Moller		
BEV:			
Service Tech:	Ivan Phiri	Service Tech:	Lukas Serumola
Service Tech:	Patricia Mazinyo	Service Tech Assistant:	Patrick Yoko
Specialist:	Frikkie van der Walt		
Field Service:			
Service Tech:	Alpheus Mareke	Service Tech:	Mathews Mosemane
CAS Project:			
Team Leader:	Bradley Nast	Service Tech:	Phineas Sibanda
Service Tech:	Julius Manamela	Service Tech:	Joseph Mampa
Certiq Project:			
Team Leader:	Segunda Fernando	Service Tech:	
Mobilaris:			
Team Leader:	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 to be done.

- Looking into mirror damages on MT42B trucks. Looking at the design and placement of the mirror. Going to order a new bracket and install and set tension of mirror bracket to deflect if bumped.
- Critical spares list review process started. Busy reviewing stock list received from Black Rock stores.
- Discuss the utilisation of 1 Epiroc artisan to oversee and assist with services.
- CAS level 9 trainings to be completed.

CAS L9 Implementation - Critical Issues Summary

- All fleet in NCH3 is currently operating on CAS level 9, except for DT109. The machine has issues with gears and only engages 1st gear. Currently busy with fault finding.

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%**

BEV Report

Weekly machine utilization summary:

Thursday 14 August 2025:

1. FL 98 –
2. FL 99 – Morning shift: Mechanical breakdown – Gears, No feedback. **(6H46min)**
3. FL 107 – Afternoon shift: Mechanical breakdown – No feedback. (2H19min)
4. FL 108 –
5. FL 112 –
6. FL 113 - Morning shift: Mechanical breakdown – Stood for clutch pressure issues, do fault finding. **(10H11min)**
7. DT 146 - Morning shift: Electrical breakdown - Reported with not connecting the battery pack. 24v batteries are reading 23.5 which is not sufficient to start up the main battery pack more especially with Air-con fans that are running at full speed constantly and when the battery is

connected it is still DCDC Charge voltage from 28v to 26.5 and which will cause the main battery to cut off at 26v. **(10H37min)**

8. DT 147 - Morning shift: Tyre breakdown - Found it on early shift with right front tyre rim outer ring locks (both) missing. (2H21min)
Morning shift: Mechanical breakdown – No feedback. (1H33min)
9. DT 149 – Morning shift: 3rd Party Supplier Fault – STRATA. **(3H25min)**
10. DT 150 – Morning shift: Tyre breakdown – Replaced flat tyre. **(4H39min)**
11. DT 162 – Afternoon shift: Electrical breakdown – No feedback. **(5H57min)**
12. DT 163 –
13. DT 171 –

Friday 15 August 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 –
5. FL 112 –
6. FL 113 - Morning shift: Mechanical breakdown – Stood for clutch pressure issues, do fault
7. Finding and replaced suction hose. **(21H07min)**
8. DT 146 -
9. DT 147 -
10. DT 149 –
11. DT 150 –
12. DT 162 –
13. DT 163 –
14. DT 171 –

Saturday 16 August 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 – Night shift: Electrical breakdown – Inverter issues, no feedback on what was fixed. **(2D11H45min)**
5. FL 112 -
6. FL 113 -
7. DT 146 -
8. DT 147 - Morning shift: Mechanical breakdown – Top up hydraulic oil. (36min)
Afternoon shift: Tyre breakdown – Change tyres. **(2D2H39min)**
9. DT 149 –
10. DT 150 –
11. DT 162 –
12. DT 163 – Morning shift: Electrical breakdown – No feedback. (01H38min)
13. DT 171 –

Sunday 17 August 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 –
5. FL 112 –
6. FL 113 - Morning shift: 3rd Party Supplier Fault – STRATA. (01H28min)
7. DT 146 –
8. DT 147 –
9. DT 149 – Morning shift: Electrical breakdown – No feedback. (11min)
10. DT 150 –
11. DT 162 –
12. DT 163 – Morning shift: Electrical breakdown – No Feedback. (1H08min)
13. DT 171 – Morning shift: Mechanical breakdown – Waiting on hydraulic block that is cracked. Stores Don't want to do a breakdown order. Parts coming with normal line haul. **(3D21H40min)**

Monday 18 August 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 – Night shift: Electrical breakdown – No feedback. **(5H46min)**
5. FL 112 –
6. FL 113 - Afternoon shift: Electrical breakdown – No feedback. (9min)
Night shift: 3rd Party Supplier Fault – STRATA. (2H46min)
7. DT 146 - Morning shift: Electrical breakdown – Batteries not connecting, need to change batteries. Batteries already ordered. **(09H04min)**
8. DT 147 –
9. DT 149 – Afternoon shift: Electrical breakdown – No feedback. (1H)
Afternoon shift: 3rd Party Supplier Fault – STRATA. (19min)
10. DT 150 –
11. DT 162 – Afternoon shift: Electrical breakdown - not tipping, tail gate sensor needs adjustment. No operator to assist. Morning shift to adjust sensor. **(14H03min)**
12. DT 163 –
13. DT 171 –

Tuesday 19 August 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 – Morning shift; Mechanical breakdown. Waited for transport to go to machine.
Need to change discharge resistors. **(9H19min)**
Night shift: Damages - is done by the boilers. Just need new window. Need to check in the store or by the mechanics if they have. **(1D09H40min)**
5. FL 112 –

6. FL 113 - Night shift: 3rd Party Supplier Fault – STRATA. (02H11min)
Morning shift: Mechanical breakdown – Bucket repairs. **(6H)**
Afternoon shift: Electrical breakdown – TCU error – No feedback. (1H28min)
7. DT 146 -
8. DT 147 -
9. DT 149 -
10. DT 150 – Morning shift: Mechanical breakdown – Top up hydraulic oil. (33min)
11. DT 162 – Night shift: Mechanical breakdown – No feedback. (35min)
12. DT 163 – Afternoon shift: Mechanical breakdown – No feedback. (18min)
13. DT 171 -

Wednesday 20 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 – Night shift: 3rd Party Supplier Fault. Petroman. Fixed loose cable on tag system. (44min)
10. DT 150 – Night shift: Electrical breakdown - BMS ERROR, pulled out low voltage plug pin that was pushed in (VPX24) and disabled subpack 3 to recover the machine. Going to replace sub pack on VPX-24. **(1D06H37min)**
11. DT 162 -
12. DT 163 -
13. DT 171 -

Planned work for the coming week:

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

SERVICES:

Maintenance Schedule Aug 2025				
Monday	Tuesday	Wednesday	Thursday	Friday
25-Aug-25	26-Aug-25	27-Aug-25	28-Aug-25	29-Aug-25
DT0131	DT0160	DT0154	DT0149	
FL0099	FL0112	FL0108	FL0082	

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

- Module 4 was found to be the fault on charger 7, charger module needs to be replaced.
- Charger 1 has a faulty fan that 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. Meeting between Epiroc and Black Rock to take place to discuss general wear and tear vs damages.
- There are more noted charger stops; this is being investigated with initial indications being worn out charger and CCS battery inlet connectors.

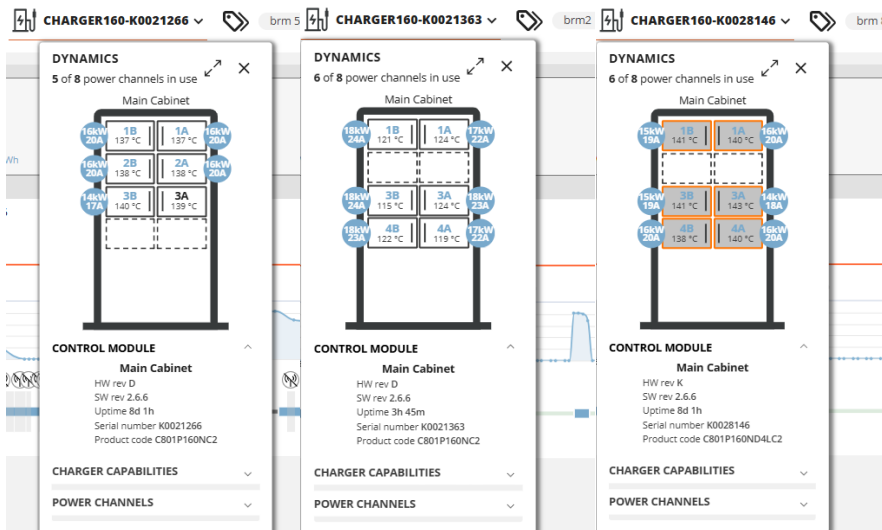


Figure 1: Chargers 2, 5 and 7 are missing 1 module each

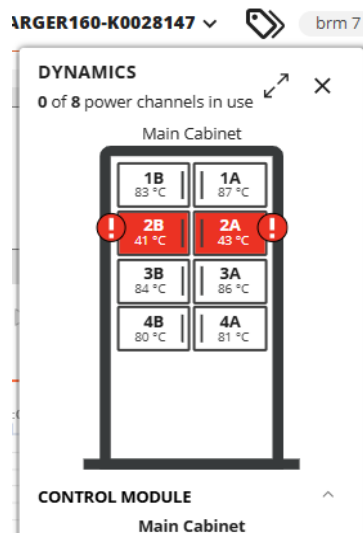


Figure 2: Chargers 1, 8 and 7 have faulty fans that need to be replaced

Table 1: Battery pack availability for week 10 2025

Battery Type	Battery ID	Status	Comment
B4 - ST14	VPY-00011	Working	
B4 - ST14	VPY-00031	Breakdown	TMS fault busy with fault finding.
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-00006	Breakdown	Battery going to be replaced by VPX-00015
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

FST Report Summary

Field Service on site:

-

CAS Report Summary

Report Type:	Weekly	Project Leader:	Hennie van Niekerk
Start Date:	06-Aug-2025	Report By:	Bradley Nast
End Date:	13-Aug-2025	Contract No:	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 is 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.**