

Weekly Site Report

BLACK ROCK WEEKLY REPORT

Weekly PSD Report
EPIROC SA

Contents

Weekly Service Report – Black Rock Mine Operations	2
Report Summary	2
General Summary	2
BEV - Critical Issues Summary	2
CAS L9 Implementation - Critical Issues Summary	3
Certiq & Mobilaris - Critical Issues Summary	3
BEV – MH4.0 Upgrades	3
Passport 360 Compliance	3
BEV Report	3
Weekly machine utilization summary:	3
Planned work for the coming week:	5
Battery and Charger Status Report	5
General summary	6
FST Report Summary	8
Field Service on site:	8
CAS Report Summary	8
Critical Issues	8
Progress Update	8
Certiq & Mobilaris Report Summary	10
General summary	10

Weekly Service Report – Black Rock Mine Operations

Report type:	Weekly	Submitted to:	Sello Taku and Sipho
Week Date:	28 July 2025	End Date	31 July 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 (Leave)		
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:	
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.

- **FL107** locked out until bucket is fixed. Ended up using it like that. Caused very long downtime of **6D08H12min**.
- **DT 150** – Multiple issues with gears going to neutral.
- Looking into mirror damages on MT42B trucks. Looking at the design and placement of the mirror.
- Critical spares list to be reviewed this week Thursday on site with Sello Sease and team.
- Discuss the utilisation of 1 Epiroc artisan to oversee and assist with services.
- **DT149** – Waiting for parts. Hydraulic block ordered. Lead time 9-14 days. Stripping part from machine in Jet Park.

CAS L9 Implementation - Critical Issues Summary

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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:

Monday 28 July 2025:

1. FL 98 –
2. **FL 99** – Morning Shift: Mechanical breakdown – Tyre change. **(7H21min)**
3. FL 107 –

4. FL 108 – Morning shift: Electrical breakdown – Replaced wiper blade. (21min)
5. FL 112 –
6. FL 113 - Morning Shift: Mechanical breakdown: Calibrate transmission. (1H16min)
7. **DT 146** - Morning shift: 3rd Party Supplier Fault – Strata. **(9H18min)**
8. DT 147 - Morning shift: Electrical breakdown – No feedback. (2H38min)
9. **DT 149** – Afternoon shift: 3rd Party Supplier Fault – Strata. (1H22min)
Afternoon shift: Electrical breakdown - Oil leak at bucket control valve, underneath the Battery did not finish. Asked night shift to continue. **(22H47min)**
10. DT 150 – Morning shift: Mechanical breakdown - Park brake problem. Fields on this machine are out of range, sometimes it doesn't even detect pedestrians again it applies park brake when the machine turns hard more especially on the left side. (Epiroc and STRATA) (1H42min)
11. DT 162 – Afternoon shift: Electrical breakdown – No feedback. (50min)
Afternoon shift: Electrical breakdown – No feedback. (2H03min)
12. DT 163 – Afternoon shift: Mechanical breakdown - Top up hydraulic oil. (1H25min)
13. DT 171 –

Tuesday 29 July 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 – Morning shift: Electrical breakdown - wiper is not working because Wimpy removed the relay. It doesn't switch off and will attend to it over the weekend. (9min)
5. FL 112 –
6. FL 113 –
7. DT 146 –
8. **DT 147** – Afternoon shift: Electrical breakdown – No feedback. (35min)
Afternoon shift: Tyre Bay breakdown – Changed tyre. **(1D6H33min)**
9. DT 149 –
10. **DT 150** – Morning shift: Mechanical breakdown - Park brake problem. Fields on this machine are out of range, sometimes it doesn't even detect pedestrians again it applies park brake when the machine turns hard more especially on the left side. (Epiroc and STRATA) **(2H10min)**
Afternoon shift – Same issue with brakes applying. **(17H51min)**
11. DT 162 –
12. DT 163 –
13. DT 171 –

Wednesday 30 July 2025:

1. FL 98 –
2. **FL 99** – Night shift: Mechanical – Replace hydraulic hose from pump to motor. **(13H04min)**
Night shift: Mechanical – was booked with water leak on night shift 20h32. Was tested on day shift and couldn't find any leak and booked it back for production. **NO FAULT!**
(12H48min)
3. FL 107 –
4. FL 108 – Morning shift: 3rd Party Supplier Fault – Strata. (45min)
5. FL 112 –
6. FL 113 - Morning shift: Electrical – No feedback. (1H)
7. DT 146 – Afternoon shift: Mechanical – BMS Error. (49min)

8. DT 147 –
9. **DT 149** – Night shift: Mechanical – Hydraulic oil leak. Ordered parts, lead time 9-14 days.
(15H50min)
10. DT 150 – Morning shift: Park brakes applying problem. (20H25min)
11. DT 162 – Morning shift: Mechanical – Replaced mirror bracket. (2H32min)
12. DT 163 – Afternoon shift: Mechanical – Low hydraulic oil, topped up. (1H)
13. DT 171 – night shift: Electrical – BMS error fixed. (17min)

Thursday 31 July 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 –
5. **FL 112** - Night shift: Electrical – Replace 12V batteries. (10H50min)
6. FL 113 -
7. DT 146 –
8. DT 147 –
9. DT 149 –
10. DT 150 –
11. DT 162 –
12. DT 163 –
13. DT 171 –

Planned work for the coming week:

- DCDC and PSB campaign plan to be actioned.

SERVICES:

4-Aug-25	5-Aug-25	6-Aug-25	7-Aug-25	8-Aug-25
Monday	Tuesday	Wednesday	Thursday	Friday
DT0118	DT0149	DT0160	DT0146	
N3 CAS 3Monthly Inspection	N3 CAS 3Monthly Inspection	N3 CAS 3Monthly Inspection	N3 CAS 3Monthly Inspection	
DT Mech Wk. Insp	N3 MT42B Mech Daily Inspection	DT Mech Wk. Insp	N3 MT42B Mech Daily Inspection	
D.T BUCKET/CHASSIS/ARTIC Insp	N3 MT42B Load Box / Chassis /A	D.T BUCKET/CHASSIS/ARTIC Insp	N3 MT42B Load Box / Chassis /A	
	FL0090 - 250Hrs - 1828538	FL0113	FL0091 - 250Hrs - 1828540	
	N3 CAS 3Monthly Inspection	N3 CAS 3Monthly Inspection	N3 CAS 3Monthly Inspection	
	ST14 250 Hours Service		ST14 250 Hours Service	
	N3 FL Diesel Auto Electrician		N3 FL Diesel Auto Electrician	
	Loader ST14 Mech Wk. Insp	N3 MT42B Mech Daily Inspection	Loader ST14 Mech Wk. Insp	
	FEL Ins BCKT/S-BLOCK/ARTIC Wk	N3 MT42B Load Box / Chassis /A	FEL Ins BCKT/S-BLOCK/ARTIC Wk	

Battery and Charger Status Report

General summary

ST14 – B4 battery packs

- We currently have 10 x ST14 – B4 battery packs and 5 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 10 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.

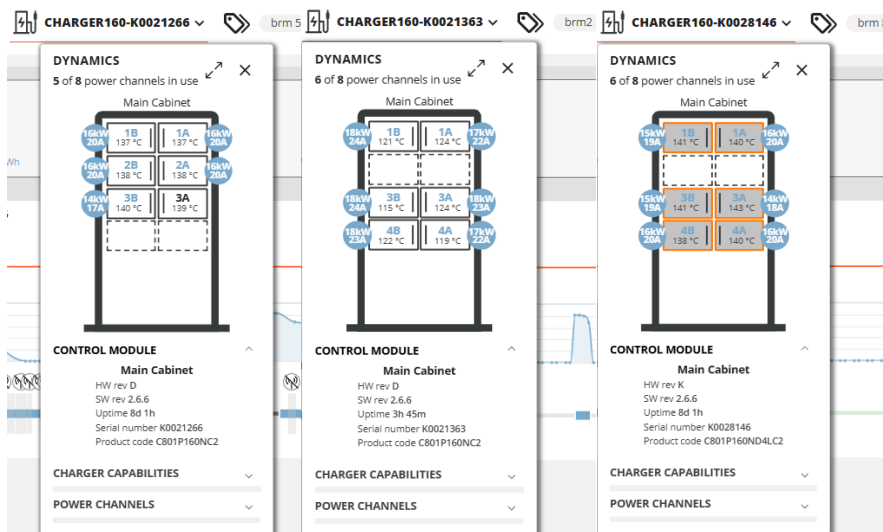


Figure 1: Chargers 2, 5 and 7 are missing 1 module each

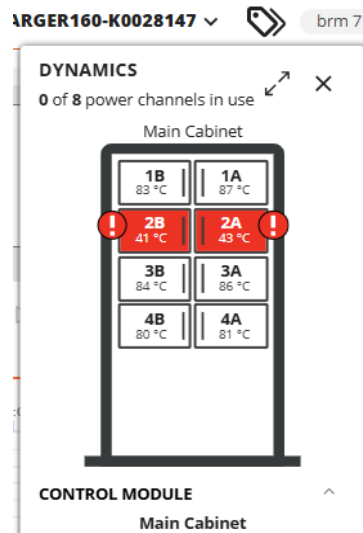


Figure 2: Chargers 1, 8 and 7 have faulty fans that need to be replaced

Table 1: Battery pack availability for week 10 2025

Battery Type	Battery ID	Status	Comment
B4 - ST14	VPY-00011	Working	
B4 - ST14	VPY-00031	Working	
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 overheating. Busy with fault finding. (6D)
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:

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CAS Report Summary

Report Type:	Weekly	Project Leader:	Hennie van Niekerk
Start Date:	09-Jun-2025	Report By:	Bradley Nast
End Date:	13-Jun-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 review and commissioning in progress. NCH3 is on a support contract.

NCH2:

From the 22 machines:

- 9 Machines, documentations have been sent for signatures,
- 5 machines are in order the project team is currently preparing the commissioning document,
- 8 machines are under investigation

Gloria:

From the 13 machines:

- 4 machines are commissioned
- 6 machines, commissioning documents are sent for signatures
- 1 Machine the engine hours are on the portal are not corresponding with the actual machine hours
- 2 machines are exempted from the project do to the ECU

NCH3:

1. Mobilaris

- a. Primary machines 52.
- b. Primary machines reporting on Mobilaris is 43
- c. Total compliance 82%

2. Certiq

- a. Primary machines 52
- b. Primary machines with kits installed 38
- c. Total number of machines reporting 29
- d. Total compliance 76%

3. Issue log and resolutions

Issues	resolutions
DT0154 machine is online but no data	Change the machine name from the DT0154 to the serial number on the MCG
HD0050 & HD0051 CCI faulty	Raised ACIGN before requesting new part
HD0062, HD0054 & HD0055 incorrect RCS software on the machine.	Replace software with correct one
machine is healthy data on the HAPI but nothing on the portal	ACIGN raised.
HD0058, HD0058, RT0044 CAN Termination and Address Plug	Quotation submitted for order.