

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 :	6
Battery and Charger Status Report.....	7
General summary	7
FST Report Summary	8
Field Service on site:	8
CAS Report Summary.....	8
Critical Issues	9
Progress Update.....	9
Certiq & Mobilaris Report Summary	9
General summary	9

Weekly Service Report – Black Rock Mine Operations

Report type:	Weekly	Submitted to:	Sello Taku and Sipho
Week Date:	04 October 2025	End Date	10 October 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

- Loaders causing dump trucks to crawl for very long distances. Strata and CAS team busy looking into issue for probable causes. FL98 had a new IM installed and rerouted wiring to Prox mods.

Suspect that the Strata system is getting external frequencies negatively affecting their system and amplifying the machine fields.

CAS L9 Implementation - Critical Issues Summary

- All fleet except BEV machines 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: **95%**
- 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

Weekly machine utilization summary:

Saturday 04 October 2025:

1. FL 98 - Morning shift: Electrical breakdown – 800V battery – No feedback. (23H59m)
2. FL 99 -
3. FL 107 -
4. FL 108 -
5. FL 112 - Morning shift: 3rd party supplier breakdown – Strata. (37min)
6. FL 113 – Morning shift: Mechanical breakdown – Replace half arrows. (1D11min)
7. DT 146 -
8. DT 147 -
9. DT 149 -
10. DT 150 -
11. DT 162 -
12. DT 163 -
13. DT 171 –

Sunday 05 October 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 -
11. DT 162 -
12. DT 163 -
13. DT 171 -

Monday 06 October 2025:

1. FL 98 - Night shift: 3rd party supplier breakdown – Strata. Investigating why loader is causing dump trucks to crawl for long distances. Replaced IM and commissioned machine. (3D9H9min)
2. FL 99 -
3. FL 107 -
4. FL 108 -
5. FL 112 - Morning shift: Mechanical breakdown – No feedback on what was done. (1H)
6. FL 113 -
7. DT 146 - Afternoon shift: Electrical breakdown – Air conditioner. No fault was found. Switch was in off position. (8H12min)
8. DT 147 -
9. DT 149 - Morning shift: 3rd party supplier breakdown – Strata. (3H55min)
Afternoon shift: 3rd party supplier breakdown – Strata. (2H22min)
Night shift: 3rd party supplier breakdown – Strata. (40min)
10. DT 150 -
11. DT 162 - Morning shift: Mechanical breakdown – Dropbox, was standing with being powerless. (1H23min)
12. DT 163 - Morning shift: Tyre breakdown – Changed a tyre. (5H21min)
13. DT 171 -

Tuesday 07 October 2025:

1. FL 98 -
2. FL 99 -
3. FL 107 -
4. FL 108 - Afternoon shift: 3rd party supplier breakdown – Strata. (5H55min)
5. FL 112 - Afternoon shift: 3rd party supplier breakdown – Strata. (1H30min)
6. FL 113 -
7. DT 146 - Afternoon shift: Electrical breakdown – Reported with BMS error. Found that coolant was low and motors temperature were high. Need to top up coolant. (1H11min)

Night shift: Mechanical breakdown – Still standing at battery bay with no coolant.

(11H59min)

8. DT 147 -
9. DT 149 - Morning shift: 3rd party supplier breakdown – Strata. (5H46min)
Night shift: 3rd party supplier breakdown – Strata. (17H34min)
10. DT 150 -
11. DT 162 - Morning shift: Mechanical breakdown - Ongoing breakdown. Dropbox and motor need to be replaced. Dropbox will be shipped from Kathu workshop. (2D21H14min)
12. DT 163 -
13. DT 171 – Night shift: Electrical breakdown – Battery VPX 28 not connecting and Hydraulic electric pump switch not working. (9H46min)

Wednesday 08 October 2025:

1. FL 98 -
2. FL 99 -
3. FL 107 - Afternoon shift: Mechanical breakdown – Operator complained about door arm rest loose. (17min)
Night shift: Electrical breakdown: No feedback. (35min)
4. FL 108 - Morning shift: Electrical breakdown – Booked with hydraulic oil overheating. No fault found. (2H19min)
5. FL 112 - Night shift: Mechanical breakdown – Grease pot damaged by fall of ground. (5H08min)
Night shift: 3rd party supplier breakdown – Strata. (46min)
Morning shift: Electrical breakdown – No feedback. (42min)
6. FL 113 -
7. DT 146 - Morning shift: Mechanical breakdown – No feedback. (30min)
Afternoon shift: Mechanical breakdown – Coolant hose burst. Bullet removed hose and handed over to night shift. (6H24min)
8. DT 147 - Morning shift: 3rd party supplier breakdown – Strata. (6H48min)
Afternoon shift: Electrical breakdown – No feedback. (2H30min)
Night shift: 3rd party supplier breakdown – Strata. (2H22min)
9. DT 149 - Afternoon shift: Electrical breakdown – No feedback. (40min)
Night shift: 3rd party supplier breakdown – Strata. (5H18min)
10. DT 150 - Morning shift: 3rd party supplier breakdown – Strata. (3H24min)
Afternoon shift: 3rd party supplier breakdown – Strata. (40min)
11. DT 162 - Morning shift: Mechanical breakdown - Ongoing breakdown. Dropbox and motor need to be replaced. Dropbox will be shipped from Kathu workshop. (3D21H14min)
12. DT 163 - Afternoon shift: Electrical breakdown – Isolator need to be replaced. Temporarily fixed and booked back to production. (1H20min)
13. DT 171 –

Thursday 09 October 2025:

1. FL 98 - Night shift: 3rd party supplier breakdown – Strata. (1H)
2. FL 99 - Night shift: Mechanical breakdown – Went to boiler shop for half arrows. (1D13H24min)
3. FL 107 -
4. FL 108 -
5. FL 112 - Morning shift: Mechanical breakdown – Grease dog bone pins. (34min)

6. FL 113 –
7. DT 146 –
8. DT 147 –
9. DT 149 - Morning shift: 3rd party supplier breakdown – Strata. (2H24min)
Afternoon shift: 3rd party supplier breakdown – Strata. (17H12min)
10. DT 150 –
11. DT 162 - Morning shift: Mechanical breakdown - Ongoing breakdown. Dropbox and motor need to be replaced. Dropbox will be shipped from Kathu workshop. (4D21H14min)
12. DT 163 –
13. DT 171 –

Friday 10 October 2025:

1. FL 98 –
2. FL 99 –
3. FL 107 –
4. FL 108 –
5. FL 112 - Morning shift: Electrical breakdown – No feedback. (33min)
Night shift: 3rd party supplier breakdown – Strata. (3H38min)
6. FL 113 - Morning shift: 3rd party supplier breakdown – Strata. (57min)
7. DT 146 - Night shift: 3rd party supplier breakdown – Strata. (22min)
Night shift: Mechanical down – Topped up coolant. (25min)
8. DT 147 –
9. DT 149 –
10. DT 150 –
11. DT 162 - Morning shift: Mechanical breakdown - Ongoing breakdown. Dropbox and motor need to be replaced. Dropbox will be shipped from Kathu workshop. (5D21H14min)
12. DT 163 - Morning shift: Electrical breakdown – Aircon fault, no fault found. (8H29min)
13. DT 171 –

Planned work for the coming week:

SERVICES:

Maintenance Schedule Oct 2025				
Monday	Tuesday	Wednesday	Thursday	Friday
13-Oct-25	14-Oct-25	15-Oct-25	16-Oct-25	17-Oct-25
DT0161	DT0150	DT0162		DT0146
FL0112	FL0091	FL0090	FL0098	
HD0055	HD0056	HD0057	HD0058	HD0061

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. BRMO need to order new module.
- Charger 5 Module 4 is removed. Module is faulty and needs to be replace. BRMO need to order new module.
- 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. New 300A cables was order and received. Need to order upgraded spring set.

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	Working	
B4 - ST14	VPY-00051	Working	
B4 - ST14	VPY-00048	Working	
B4 - ST14	VPY-00049	Working	
B4 - ST14	VPY-00088	Breakdown	TMS/Subpack/VCB connector.
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	Working	
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

Battery overheat summary:

- No battery overheating for the week.

FST Report Summary

Field Service on site:

- Attend HD0069 – Rental drill – No power
- Commision new ST14 – FL0121
- Attend RT0062 on Nchwaneng 2 to repair issues.

CAS Report Summary

Report Type:	Weekly	Project Leader:	Hennie van Niekerk
Start Date:	04-Oct-2025	Report By:	Bradley Nast
End Date:	10-Oct-2025	Contract No:	BPE145D

Critical Issues

1. BEV machines software is still not upgraded yet live on CAS L9.
2. Team is busy with software update and commissioning in NCH2.

Progress Update

1. All diesel TMMs in NCH3 software is upgrade and commissioned on CAS L9.
2. All TMMs in NCH2 are live on L9 excluding FL86(on Breakdown) & DT95(to be commissioned)

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
- 2 Machines' commissioning document sent for signature by the Black Rock project team; those are currently not communicating.
- 12 Machines are complete, and Commissioning documents are signed.
- 1 machine work in a section with no Wi-Fi. Can't test and commission. Issue raised with Wayne
- 1 Machine not in use. Mine manager reserved future projects.
- 7 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.