Weekly Site Report

BLACK ROCK WEEKLY REPORT



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Weekly Service Report – Black Rock Mine Operations

Report type:	Weekly	Submitted to:	Sello Taku and Sipho	
Week Date:	18 October 2025	End Date	24 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 Fernado	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



- DT162 Breakdown Rear traction motor and Dropbox failure. New repaired motor installed but temp sensors inside motor shows open line. Need to replace motor again. There is a new motor in store stock. Epiroc to organise extra artisans to assist. (5D1H15min)
- DT171 Ongoing breakdown. A-frame bearing damaged, need to be replaced. (5D23H15min)
- Continuing with audit on battery disconnects and compatibility.

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:	97%
•	CASL9 (Gloria):	100%
•	CASL9 (Nch2):	98%
•	CAS L9 (Nch3):	98%
•	Certig & Mobilaris N2:	95%

Certiq & Mobilaris Gloria:
 91% - John needs to offboard.

BEV Report

Weekly machine utilization summary:

Saturday 18 October 2025:

- 1. FL 98 -
- 2. FL 99 -
- 3. FL 107 -
- 4. FL 108 Morning shift: Electrical breakdown. No feedback on what was done. (2H28min)
- 5. FL 112 Morning shift: 3rd party supplier fault Strata. (2H57min)
- 6. FL 113 Night shift: Mechanical breakdown Hydraulic oil. No feedback on what was done. **(6H35min)**
- 7. DT 146 -
- 8. DT 147 -
- 9. DT 149 -
- 10. DT 150 -
- 11. DT 162 -
- 12. DT 163 -



13. DT 171 -

Sunday 19 October 2025:

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    FL 98 -
    FL 99 -
    FL 107 -
    FL 108 -
    FL 112 - Morning shift: Breakdown tyre bay – At tyre bay for tire pressure inspection. (27min)
    FL 113 - Morning shift: Breakdown tyre bay – At tyre bay for tire pressure inspection. (23min)
    DT 146 -
    DT 147 -
    DT 149 -
    DT 150 -
    DT 162 -
    DT 163 -
    DT 171 -
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Monday 20 October 2025:

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    FL 98 -
    FL 99 -
    FL 107 -
    FL 108 - Morning shift: Breakdown boilermaker – Replaced half arrows. (1D06H02min)
    FL 112 -
    FL 113 -
    DT 146 -
    DT 147 - Morning shift: Mechanical breakdown – Had a loose connection on the red stop lamp. Repaired and tested. (1H09min)
    DT 149 -
    DT 150 -
    DT 162 -
    DT 163 -
    DT 171 – Ongoing breakdown: Standing at parking bay with A-frame bearing damage. (1D1H15min)
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Tuesday 21 October 2025:

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    FL 98 -
    FL 99 -
    FL 107 -
    FL 108 -
    FL 112 - Night shift: 3<sup>rd</sup> party supplier fault – Strata. (3H47min)
    FL 113 -
    DT 146 -
    DT 147 -
    DT 149 -
    DT 150 -
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- 11. DT 162 Afternoon shift: Breakdown tyre bay Need to go to tyre bay to re-torque after 2 loads. (1H56min)
- 12. DT 163 -
- 13. DT 171 Morning shift: Mechanical breakdown A frame bearing damaged, need to replace. (2D0H17min)

Ongoing breakdown: Standing at parking bay with A-frame bearing damage. (2D1H15min)

Wednesday 22 October 2025:

- 1. FL 98 -
- 2. FL 99 Morning shift: Breakdown mechanical Changed transmission mounting rubbers. (2H50min)
- 3. FL 107 Night shift: Breakdown Electrical 800V battery No feedback. (1H56min)
- 4. FL 108 -
- 5. FL 112 Morning shift: Mechanical breakdown Changed transmission mounting rubbers. (2H03min)

Afternoon shift: 3rd party supplier fault – Strata. (36min) Afternoon shift: 3rd party supplier fault – Strata. (4H49min)

- 6. FL 113 Night shift: Electrical breakdown No feedback. (2H04min)
- 7. DT 146 -
- 8. DT 147 -
- 9. DT 149 Afternoon shift: Electrical breakdown No feedback. (1H54min)
- 10 DT 150 -
- 11. DT 162 Ongoing breakdown: New motor that was installed shows temp high. Motor faulty. Need to install new motor. (3D23H15min)
- 12. DT 163 -
- 13. DT 171 Morning shift: 3rd party supplier fault Strata. (21min)

 Ongoing breakdown: Standing at parking bay with A-frame bearing damage. (3D1H15min)

Thursday 23 October 2025:

- 1. FL 98 -
- 2. FL 99 Morning shift: Mechanical breakdown Found 1 cooler fan completely loose on inspection. Fixed. (1H04min)
- 3. FL 107 -
- 4. FL 108 Night shift: Mechanical breakdown Had multiple faults with battery VPY00011, changed battery with VPY00083 and repaired loose connection on wake-up relay base. (3H12min)
- 5. FL 112 Afternoon shift: 3rd party supplier fault Strata. (9H29min)
- 6. FL 113 –
- 7. DT 146 Morning shift: Mechanical breakdown No feedback. (43min)
- 8. DT 147 -
- 9. DT 149 Night shift: Mechanical breakdown Red stop lamp. No feedback. (06H30min)
- 10. DT 150 -
- 11. DT 162 Ongoing breakdown: New motor that was installed shows temp high. Motor faulty. Need to install new motor. (4D23H15min)
- 12. DT 163 -
- 13. DT 171 –Ongoing breakdown: Standing at parking bay with A-frame bearing damage. (4D1H15min)



Friday 24 October 2025:

- 1. FL 98 -
- 2. FL 99 -
- 3. FL 107 -
- 4. FL 108 -
- 5. FL 112 Morning shift: 3rd party supplier fault Strata. (2H57min)
- 6. FL 113 -
- 7. DT 146 -
- 8. DT 147 Afternoon shift: Electrical breakdown No feedback. (33min)
- 9. DT 149 -
- 10. DT 150 -
- 11. DT 162 Ongoing breakdown: New motor that was installed shows temp high. Motor faulty. Need to install new motor. **(5D23H15min)**
- 12. DT 163 -
- 13. DT 171 Ongoing breakdown: Standing at parking bay with A-frame bearing damage. (5D1H15min)

Planned work for the coming week:

- Battery technicians doing onboarding to start DC/DC campaign on batteries.
- Ongoing S2 audits. (HD49, HD50, HD51) Last 3 machines to sort out connectivity. All 3 of them is on service this week.
- Doing audit on batteries to see which batteries are not working on what machines and fault finding the issue to remedy this.

SERVICES:

Maintenance Schedule Oct 2025				
Monday	Tuesday	Wednesday	Thursday	Friday
27-Oct-25	28-Oct-25	29-Oct-25	30-Oct-25	31-Oct-25
DT0145	DT0171	DT0163	DT0118	
FL0107	FL0101	FL0056	FL0103	

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 7 one Module is switch off. It trips mini sub braker when it is switch on. Charging at 75% capacity of post.
- Charger 8 one Module is switch off. It trips mini sub braker when it is switch on. Charging at 75% capacity of post.
- 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. Piet did order upgrade kit. Waiting parts.

General

- 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.
- VPY00088 Spare parts at BR, need to go down to repair battery.

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	Subpack/VCB connector/VCCU
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:

- 21/10/2025: VPX-00048 was overheating 38Deg (Did self-test and after it cools down)

FST Report Summary

Field Service on site:

- RT0062 Fix issues identified with delivery.
- DT162 Assist with traction motor installation. (Breakdown)

CAS Report Summary

Report Type:WeeklyProject Leader:Hennie van NiekerkStart Date:18-Oct-2025Report By:Bradley NastEnd Date:24-Oct-2025Contract No:BPE145D

Critical Issues

- 1. BEV machines software is still not upgraded yet live on CAS L9.
- 2. The team is to move to Gloria for software update and commissioning.

Progress Update

- 1. All diesel TMMs in NCH3 software is upgrade and commissioned on CAS L9.
- 2. All TMMs in NCH2 are Updated and live on L9 excluding FL92(On Breakdown)
- 3. All ST14 in Gloria need a software update.

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.

Some machines still having trouble connecting to CERTIQ after software was installed.