

Rio Tinto

Tire Awareness



Tire Functions

STEER



TRAVEL

Absorbs shocks



Supports the load



Transfers traction and braking forces to the surface

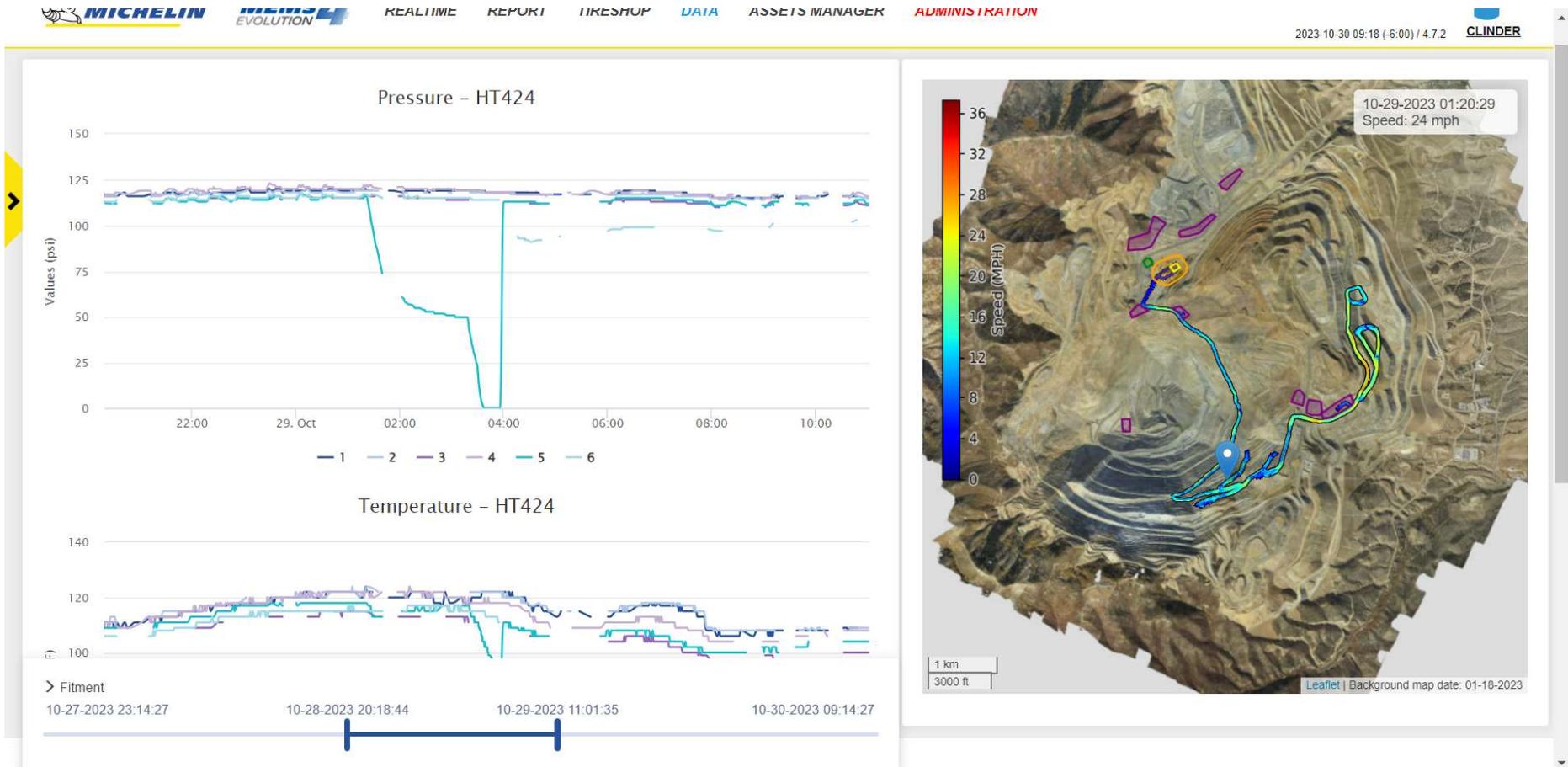
ENDURANCE

Changes and maintains direction of travel

1. Heat and Pressure Management

Looking up rock-cut locations

- Data > Vehicle > Set Up Time Frame > Click on Yellow Arrow > Show Map



2. Operator Best Practices

- Avoid turning the steering wheel as much as possible while equipment is stationary
- Avoid windrows, berms, ditches, face toe and dump berms
- Slow down before making sharp turns or u-turns
- Check speeds on downhill hauls, pits and dumps
- Avoid constant braking – use the retarder
- Inspect tires and wheels regularly

2. Operator Best Practices

Calling for road cleanups

Calling for spotting

Drivers spotting others

Calling for inspections

3. Haul Road Maintenance



Rocks on the haul road (spillage)

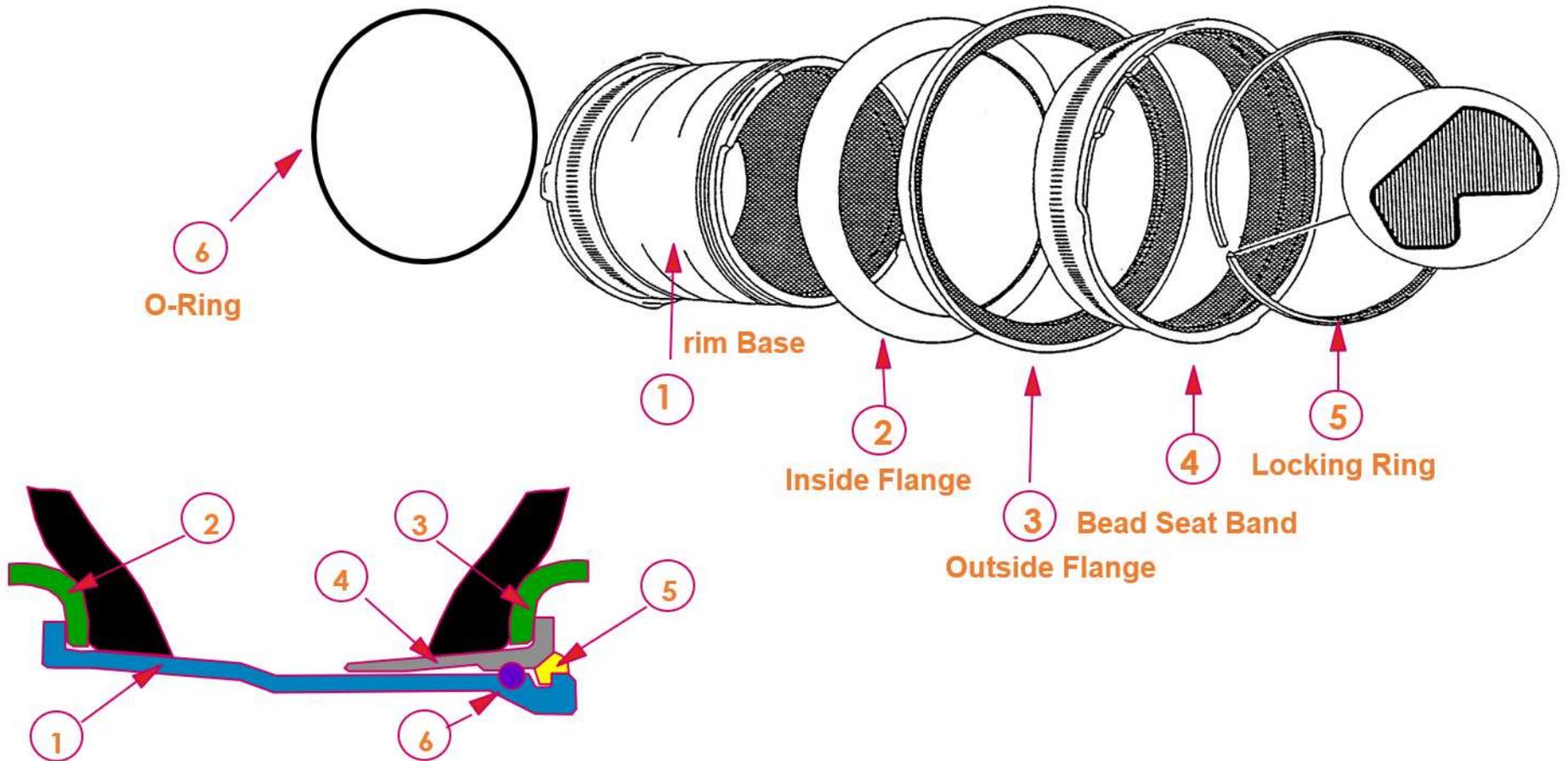


Truck travelling close to the berm

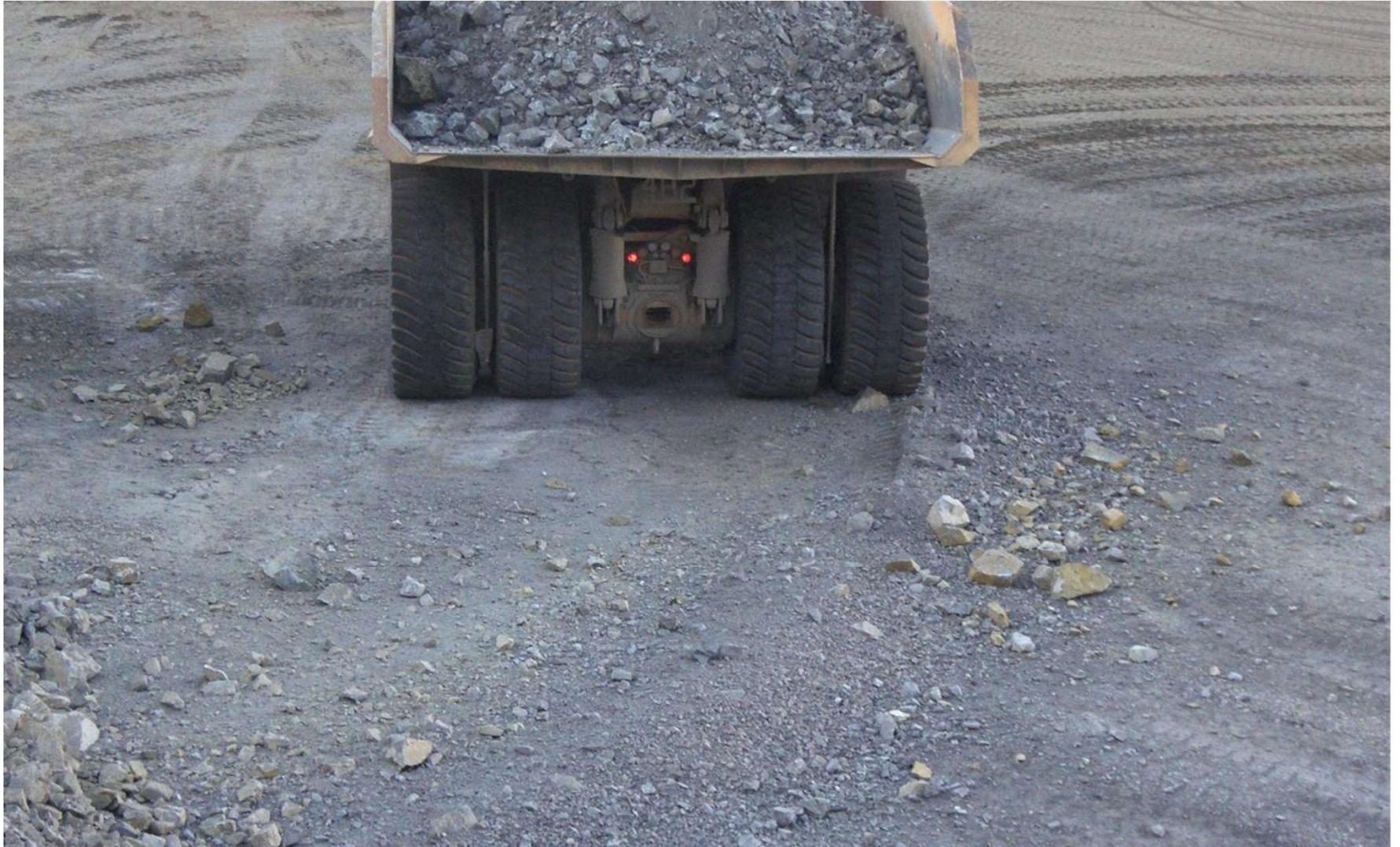
5. Tire and Rim Inspections



5. Tire and Rim Inspections - Structure of a Wheel



6. Load Management – Shovel Pit Spillage



6. Load Management – Load Distribution



Turning at higher speeds



Its not a rally

7. Support Equipment

- Assign graders and rubber-tire dozers to roads and shovels
- Driver radio communication of spills

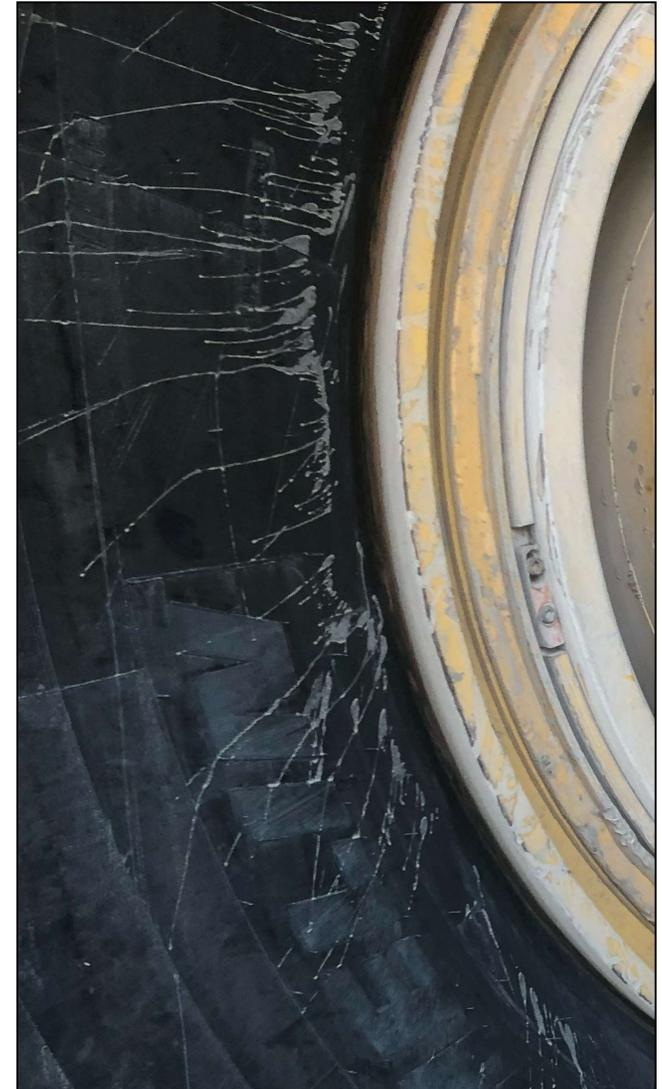


8. Scrap Tire Management - Tire Damage Inspections



Bead Damage

This will happen when a tire is under-inflated. It will flex against the flange and bead seat



8. Scrap Tire Management - Tire Damage Inspections

Rock between the duals

If you are alerted of a rock stuck in the duals:



- If possible, Do not move the truck
- Call your Supervisor
- Notify Mine Care
- Tire Craftsman will go out to remove rock if possible.

8. Scrap Tire Management - Tire Damage Inspections

Abnormalities

Sidewall Bubble

- If a haul truck tire has a bulge, the truck shall **Not be driven.**
- Have it inspected the right way
- **Do Not** Touch it.



Sidewall Gouge

- If **any** wires are showing have the truck inspected



8. Scrap Tire Management - Tire Damage Inspections

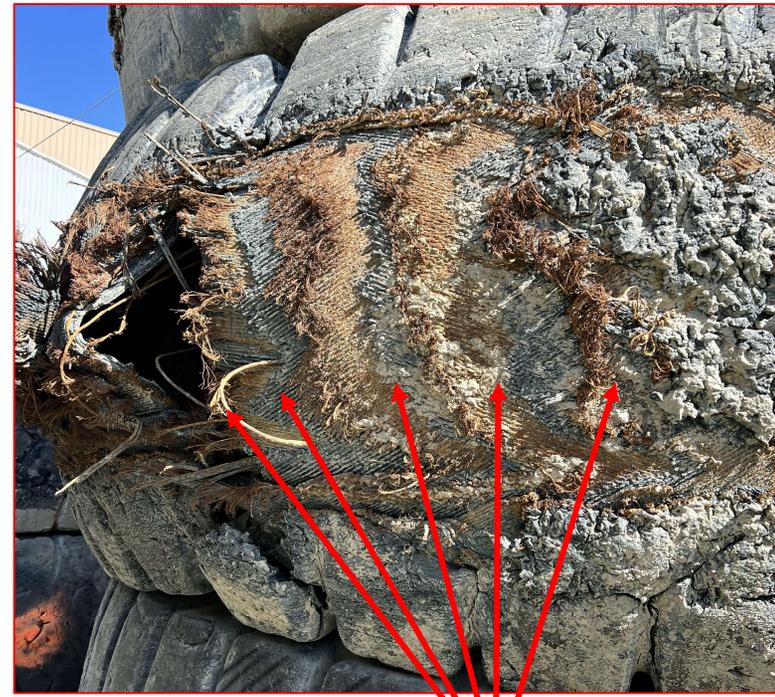
Wear Out vs. Beyond Wear Out

Good Wear Out



3 Layer of Cords
Showing

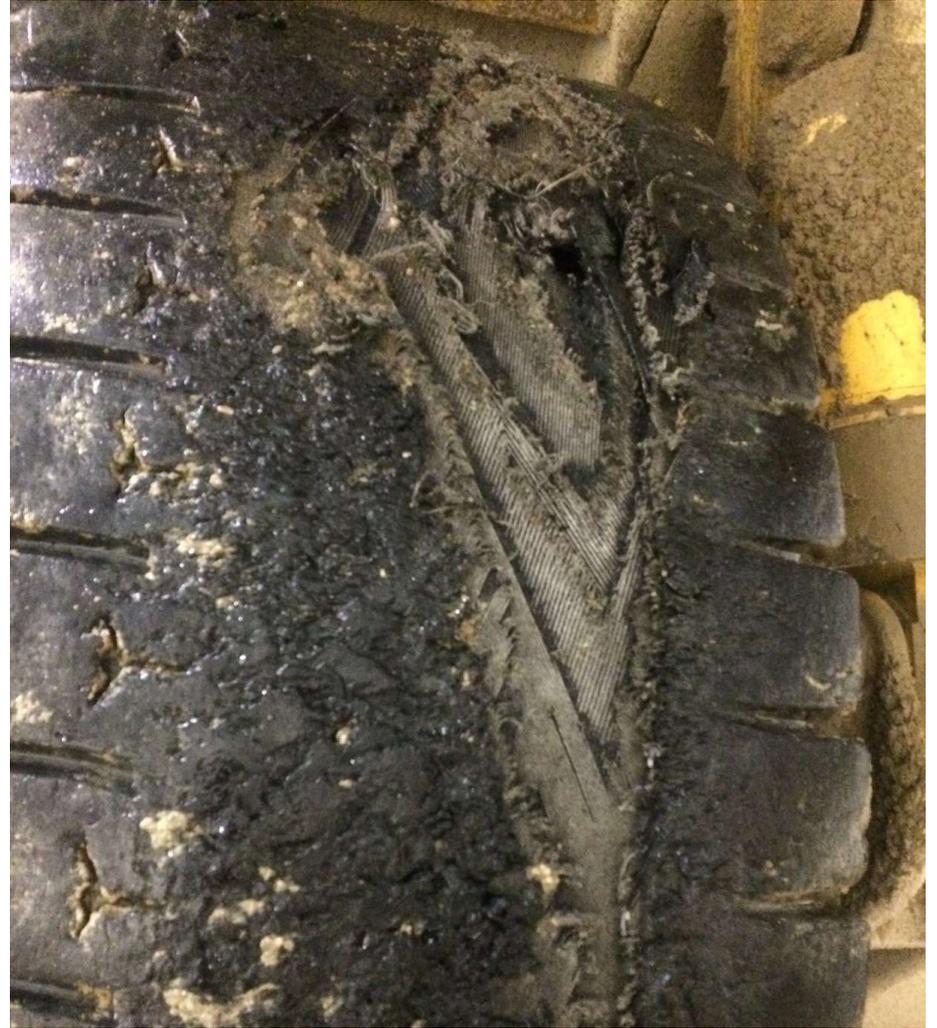
Beyond Wear Out



5 Layer of Cords
Showing

8. Scrap Tire Management - Tire Damage Inspections

How many cords do you see?

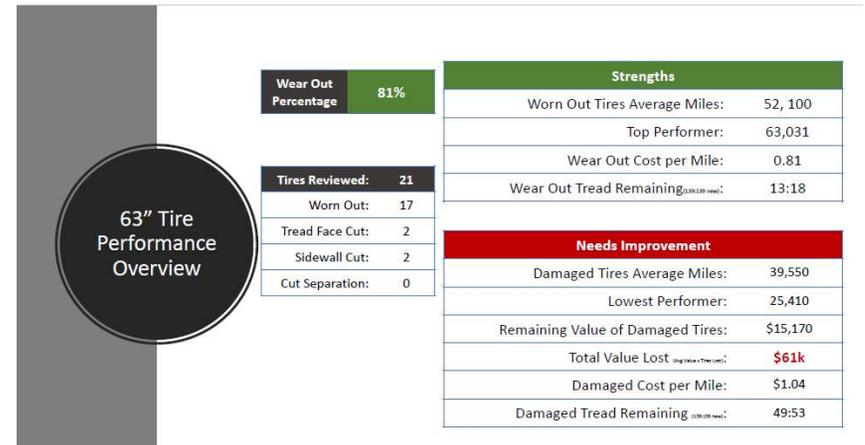


10. Communication / Reporting

- Consistent, visible reports of initiatives and progress
- Solicit suggestions and make recommendations for the process

KUCC Tire Reports:

- Daily Tire Report
- Bi-weekly OOS report
- Monthly Dashboards
- Environmental
- Monthly Rough Road Report (In process)

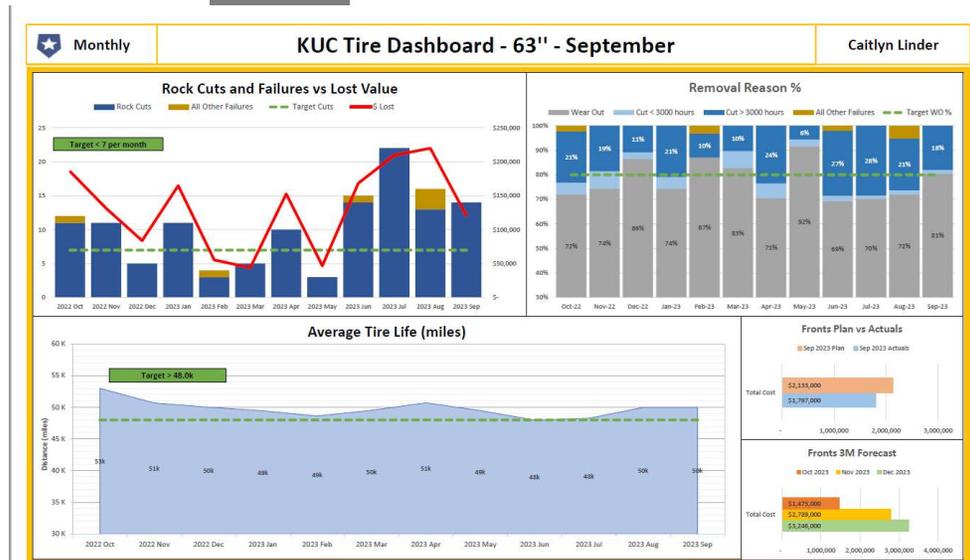


All,

There were 0 haul truck rock cuts that occurred over the previous 24 hours.

63" Tire Rock Cut Report	
Weekly – 10/23 to 010/29	Week Tire Damage Contingency
0	2
Monthly Total – October	Month Tire Damage Contingency
5	7
Year-To-Date – 2023	Full-Year Damage Contingency
96	84

Call out spillage and bad road conditions that could cause cuts and damage.



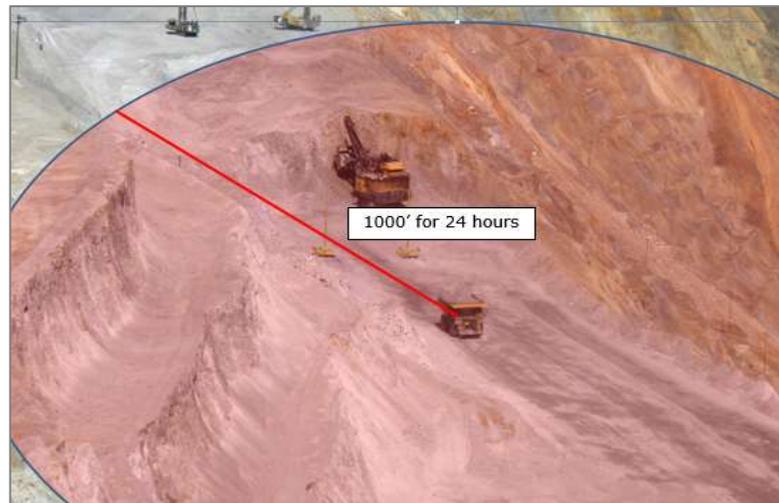
Tire Electrification – External Energy Sources

- Lightning
 - Everyone
- Overhead Power Lines
 - Haul Trucks
 - Cranes
 - Shovels
 - Drills
- Trail Cables
 - Light and Medium Duty
 - Haul Trucks
 - Drills
 - Support Equipment



Tire Electrification - Standard

- **1000 foot quarantine for 24 HOURS**
 - When **THE BODY** of any rubber-tired equipment (including light vehicles) is suspected of or comes in contact with lightning, a power line, or a trail cable this quarantine must be followed.
- **1000 foot quarantine for 2 HOURS**
 - If **ONLY THE TIRE** on any rubber-tired equipment (including light vehicles) is suspected of or comes in contact with a trail cable this quarantine must be followed.
- The **rubber-tired equipment must NOT be moved from the incident location/1000 foot quarantine** until inspected and released by a competent Tire Craftsman.



Who is responsible for tires?

We all are