



PETRON® CORPORATION

# Proof of Performance Petrotac EP Compound 30



# Protection in Harsh Conditions

**Application:** P&H 4100

**Length of Time in Service:** 100,000 Hrs

**P&H Recommended Change-out Interval for Swing Gear:** 50,000 Hrs

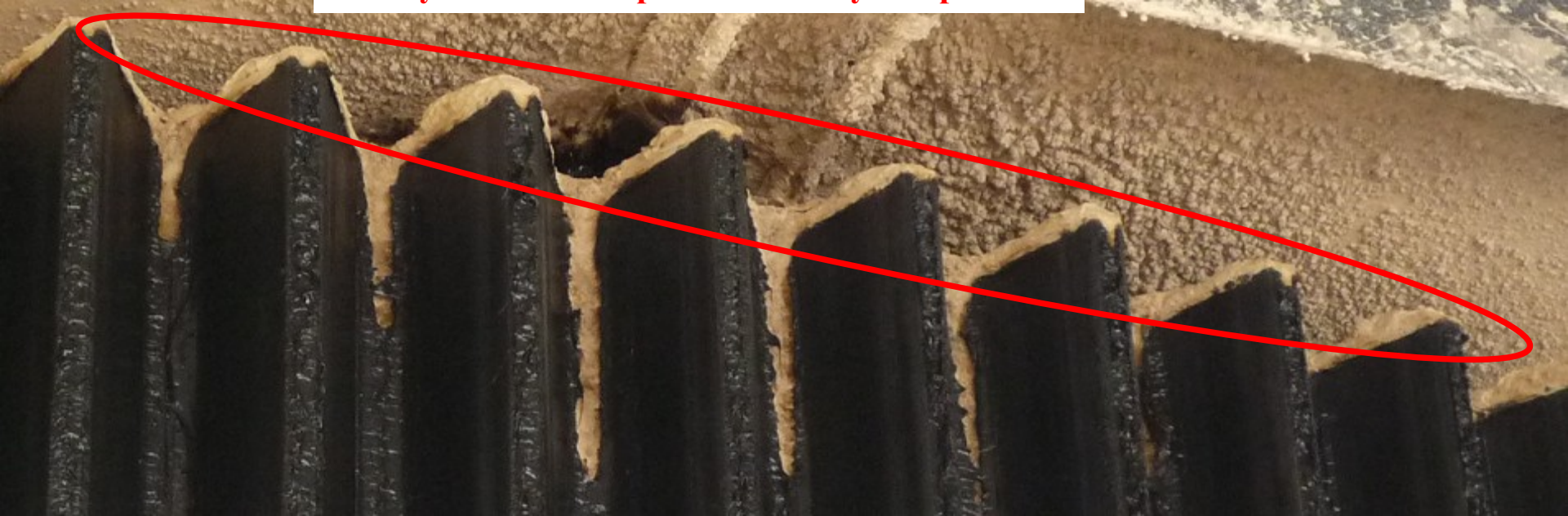
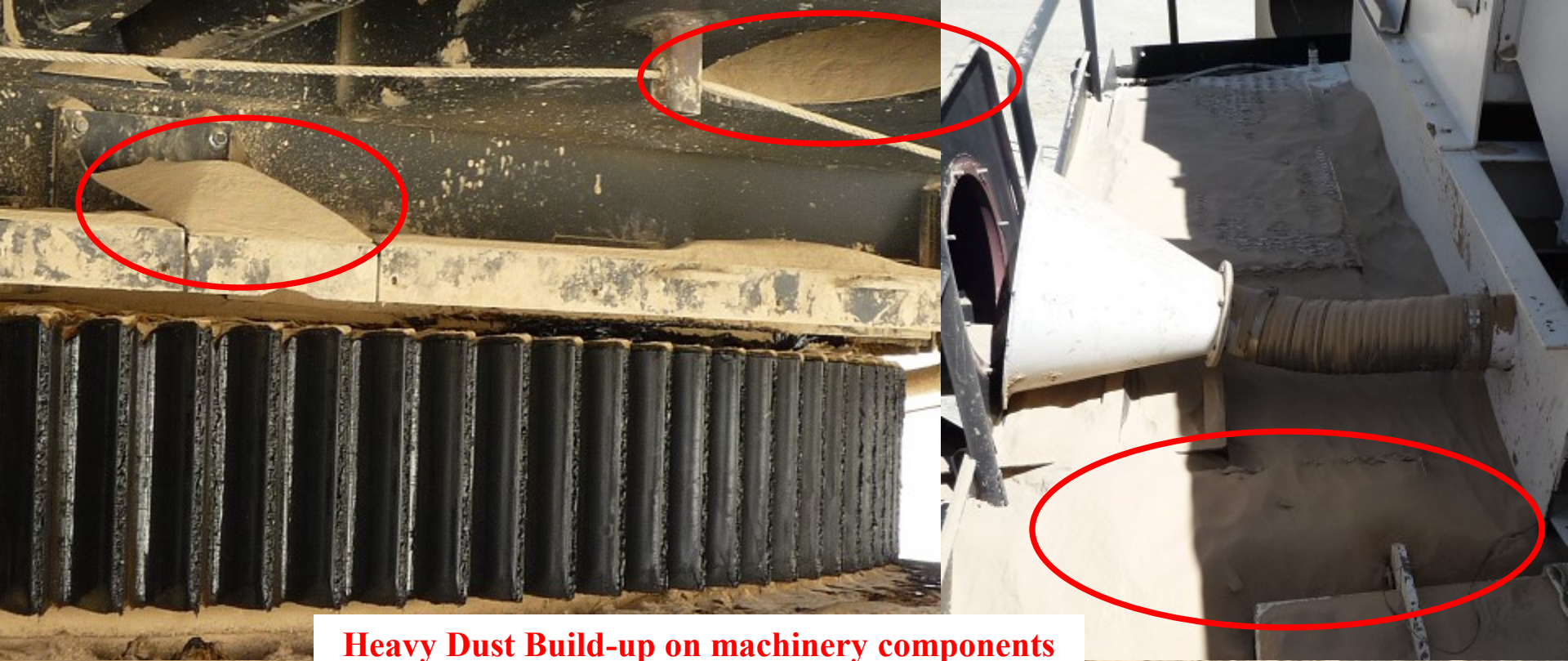
**Lubricant:** Petrotac EP Compound 30

**Description:**

The mine is located in northern Chile in a very dry and dusty area. No rain is present at any time. The main risk of damage is caused by the dust produced in this extremely dry region.

Historically, wear part hours on these shovels is markedly less than benchmark hours that are established by the OEM. House swing gears are an example of this situation.



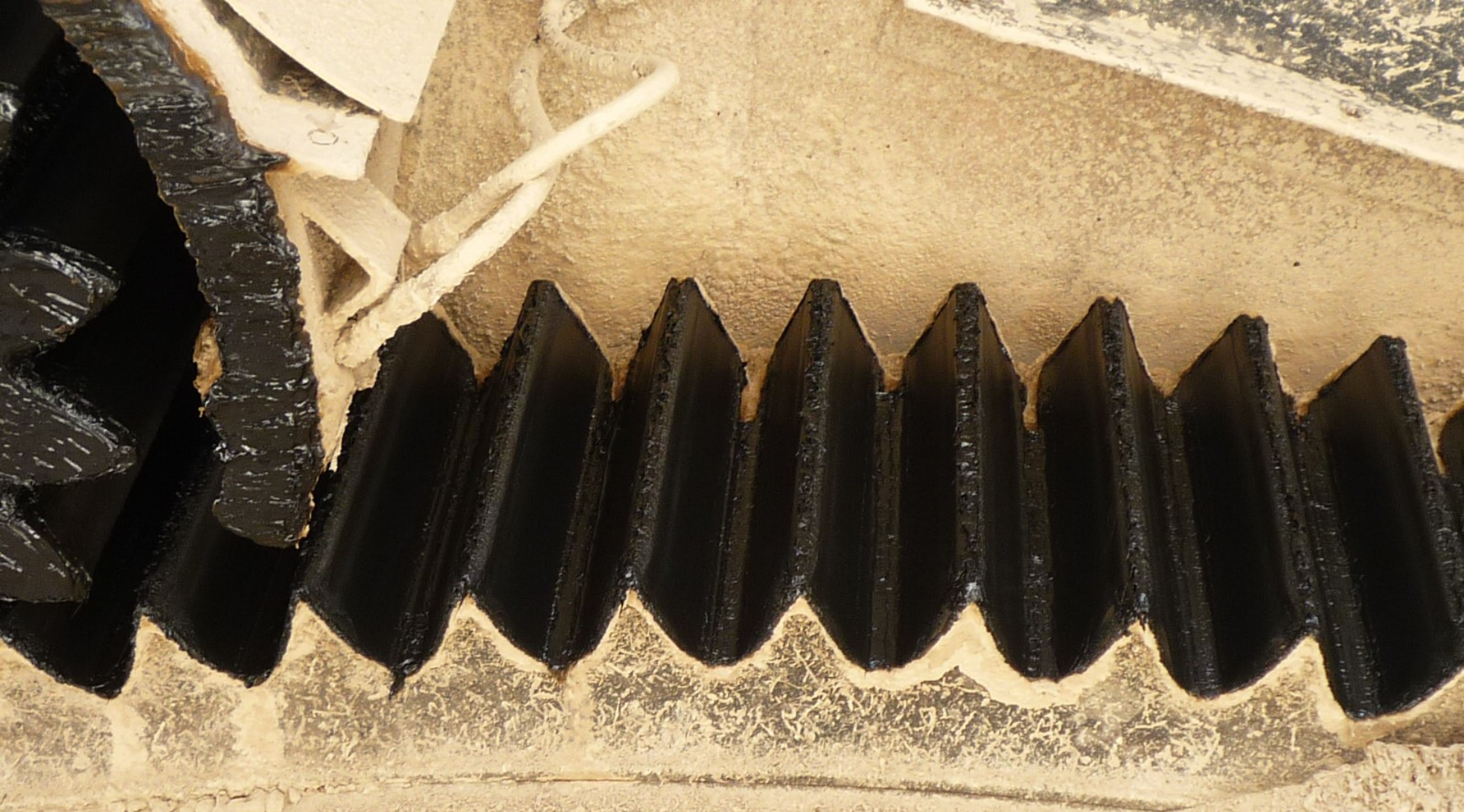




## P&H 4100 Swing Gear Life

- The following pictures show the Ring Gear at 100, 560 service hours.
- The schedule to change the swing gear will be at 101,000 hours.
- The gear will be replaced because of hairline cracks discovered during routine inspections in the roots of numerous teeth.
- The teeth are in very good condition for the high hours attained under these harsh conditions. The swing gear has never been rotated.
- The maintenance standards at this mine are excellent.





## **Swing Gear Teeth**

**No superficial defects and no wear pattern  
caused by heavy dust and abrasives.**





**Used swing gear compared to new swing gear. Notice the crest of the tooth profile**



## Petron Petrotac EP Compound 30 demonstrated superior protection under the harshest of working conditions

Outstanding life of the Swing Gear and Roller Circle combined with good maintenance practices have allowed the mine operator to enjoy substantial savings.

Two additional shovels working in this pit have similar swing gear life. Levels of protection provided by Petrotac EP Compound 30 are consistent on all three shovels.

Other components on these shovels that utilize Petrotac EP Compound 30 also demonstrated extended wear-parts life that was well beyond the hours anticipated for these harsh digging conditions.