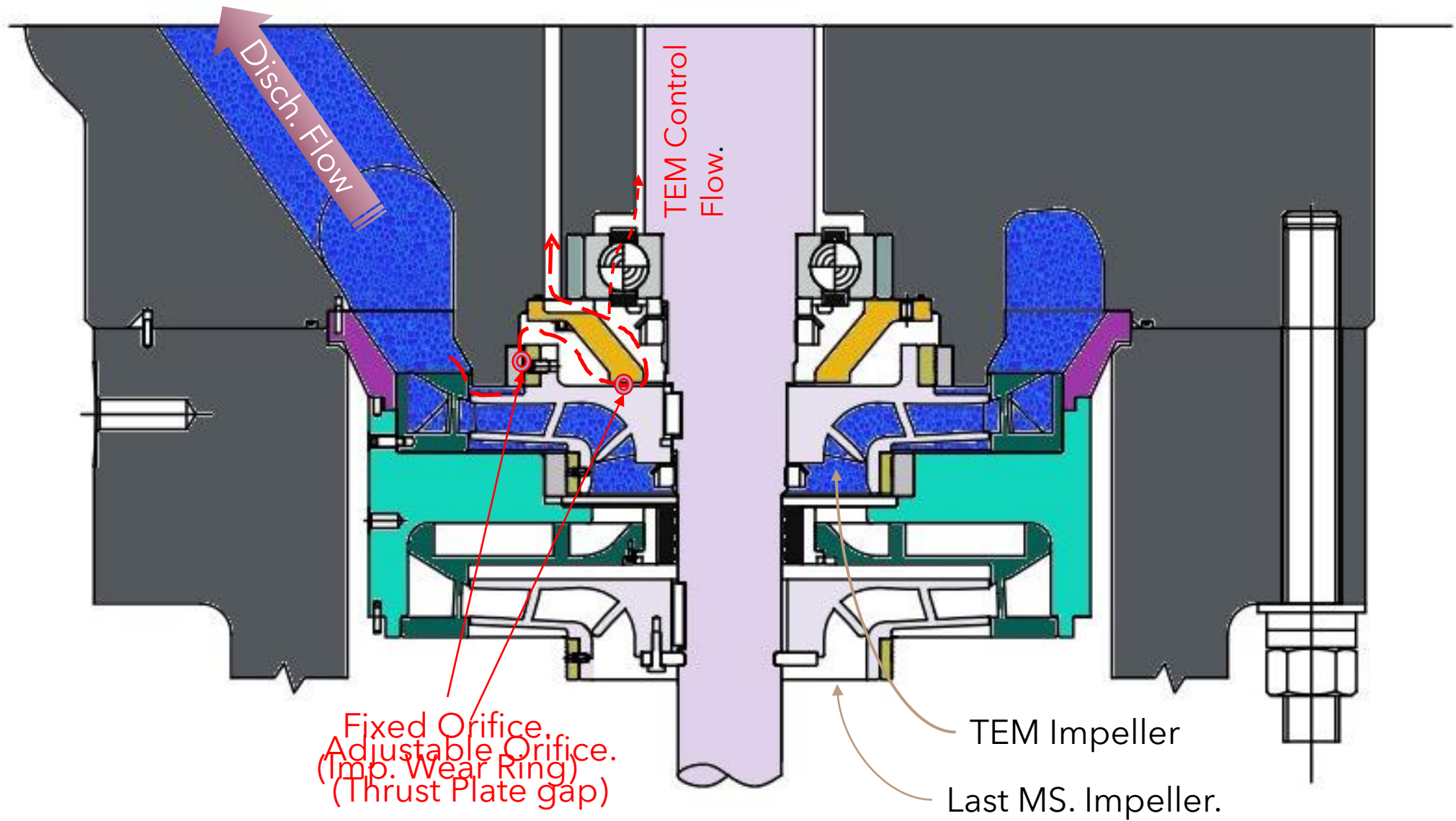


TEM Impeller.

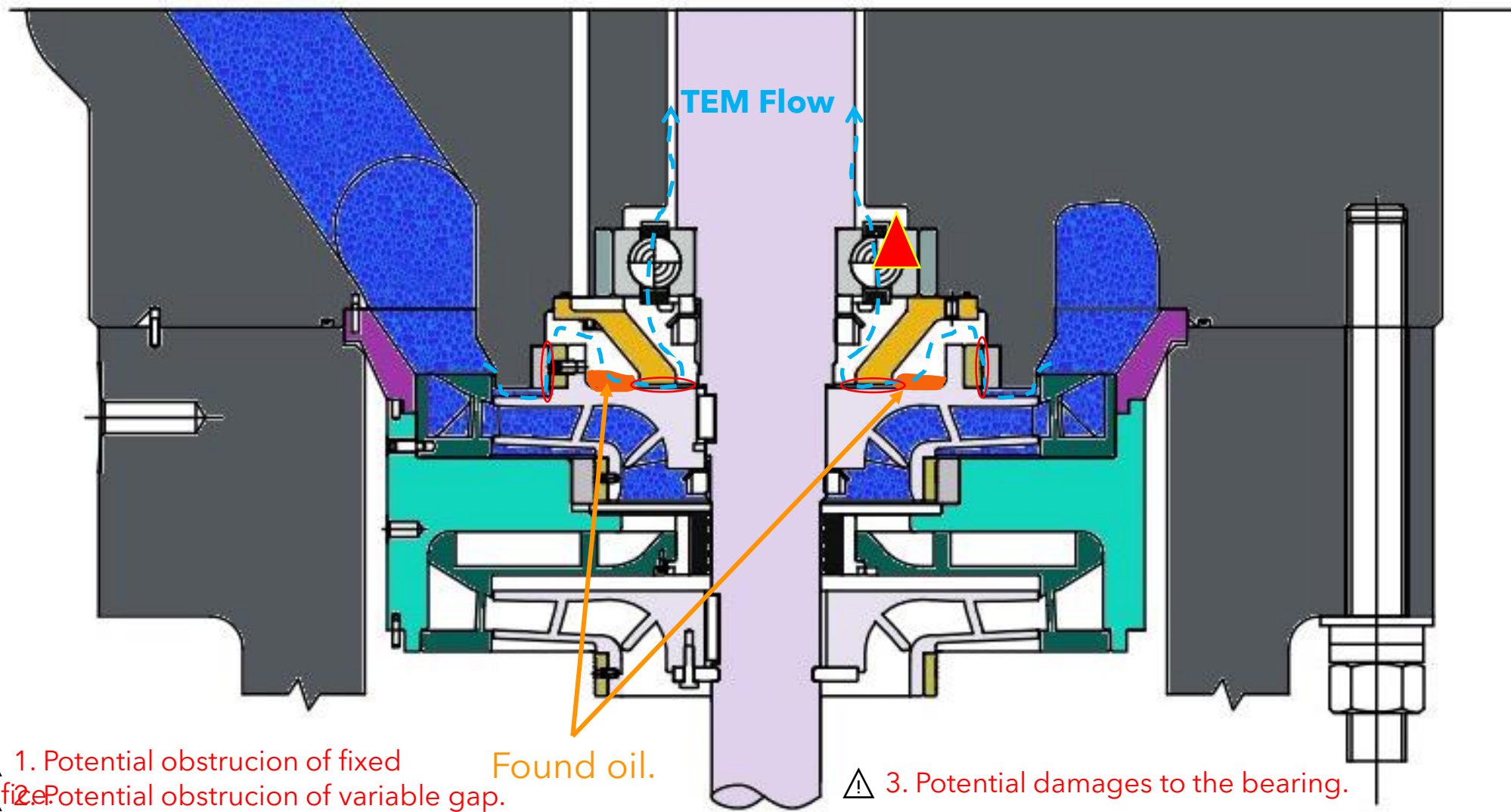
Oil in the upper chamber.
Potential consequences.





TEM, principles and potential problems.

- Thrust Equalizing Mechanism (TEM) works by a fixed orifice (upper wear ring of the TEM impeller) and an adjustable gap between the TEM impeller and the Thrust Plate, in function of flow and discharge pressure.
- The wear ring clearance and the adjustable gap were calculated for a specific pump model and working conditions.
- If some pollution or contamination can modify these parameters, the mechanism will be affected.
- A considerable amount of oil was found into the upper chamber of the TEM impeller.
- The oil becomes solid at -10°C in accordance with recent analysis, it easily can affect to the TEM.
- Additionally, the motor lower bearing can be compromised due to the solid particles.



- ⚠ 1. Potential obstruction of fixed orifice.
- ⚠ 2. Potential obstruction of variable gap.

Found oil.

- ⚠ 3. Potential damages to the bearing.