

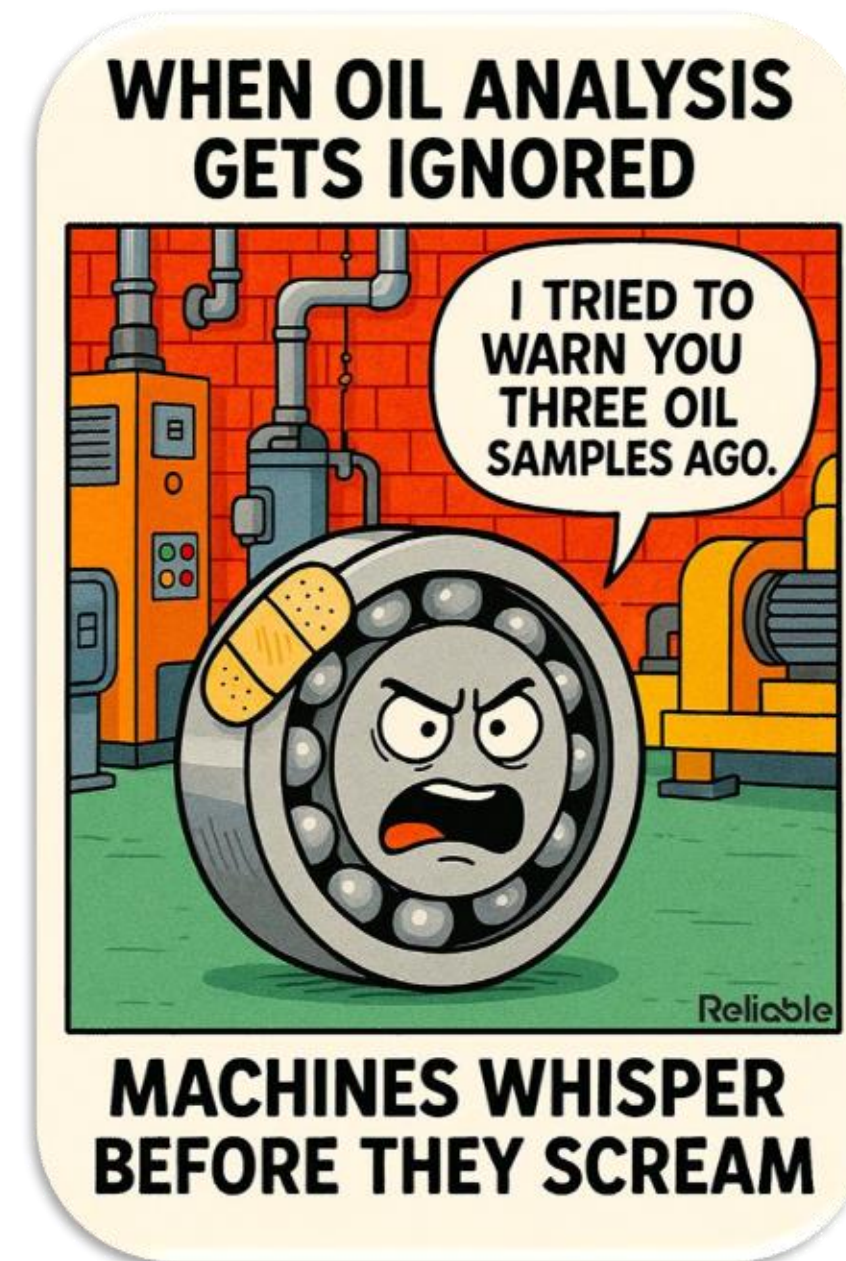
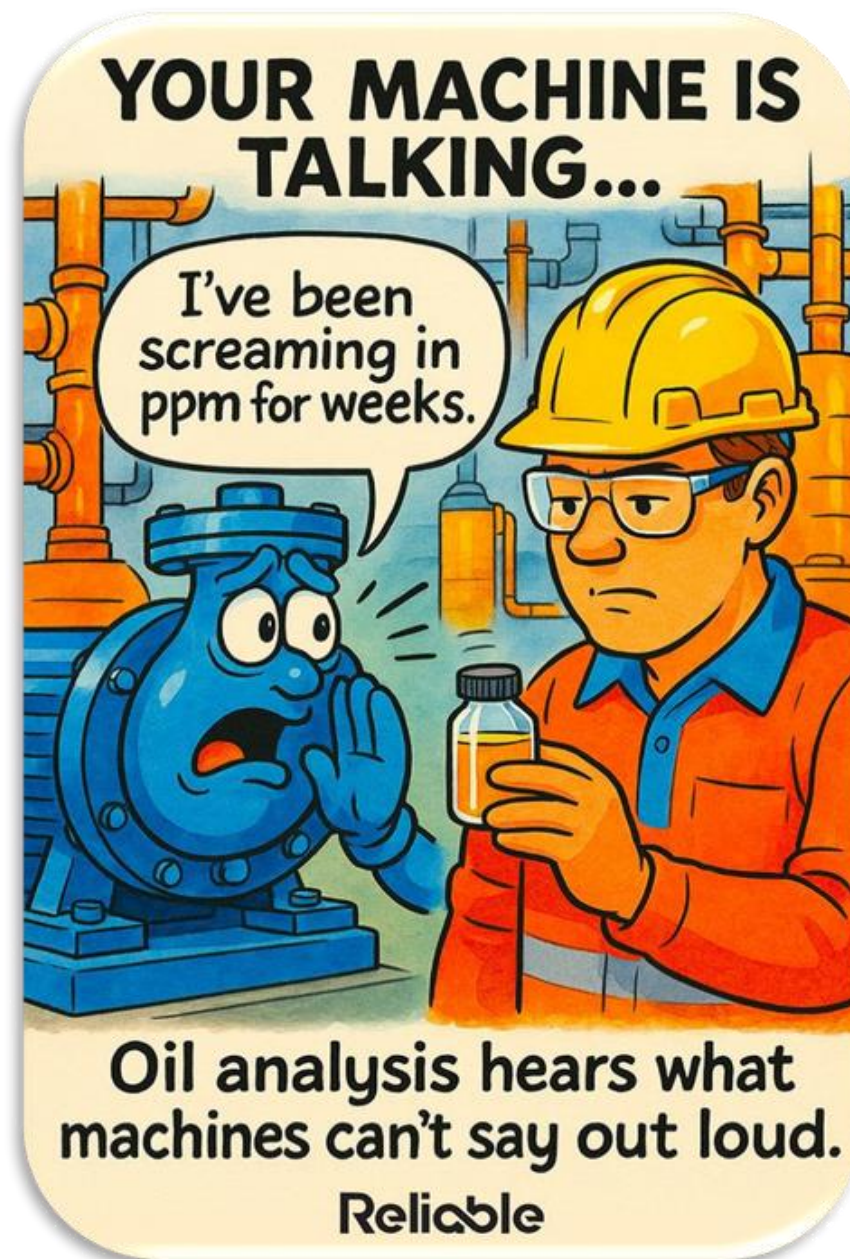
LUBRICANT EXPO MIDDLE EAST

21st January 2026

Vanda Franco
Associate Manager – Operations (onshore)



Your oil and machine are talking.



Are you listening to them?

AGENDA

✓ **About us** - Petrotec and Petrotec Services and Rentals

✓ **Cycle of Condition Monitoring**

✓ **Qatar** - Condition Monitoring

✓ **Case studies Onshore and Offshore** – ESP and Solvancer Technologies





About us...

❖ Petrotec

- Is established in Qatar since 1989 and in Kuwait since 2018.
- +10 Service Centres / Workshops
- +600 employees, 35 nationalities.

❖ Petrotec Services and Rentals

- Operating in Qatar since 2007.
- Jobs in Kuwait and Oman.
- 30 employees, 8 nationalities.



- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018
- TRACE Certified (Business Ethics)



About us...

Oil Care Services

- OCM
- Oil Filtration, Flushing & Replacement
- Oil life extension



Offshore Chemical Services

- Produced water
- Online injection

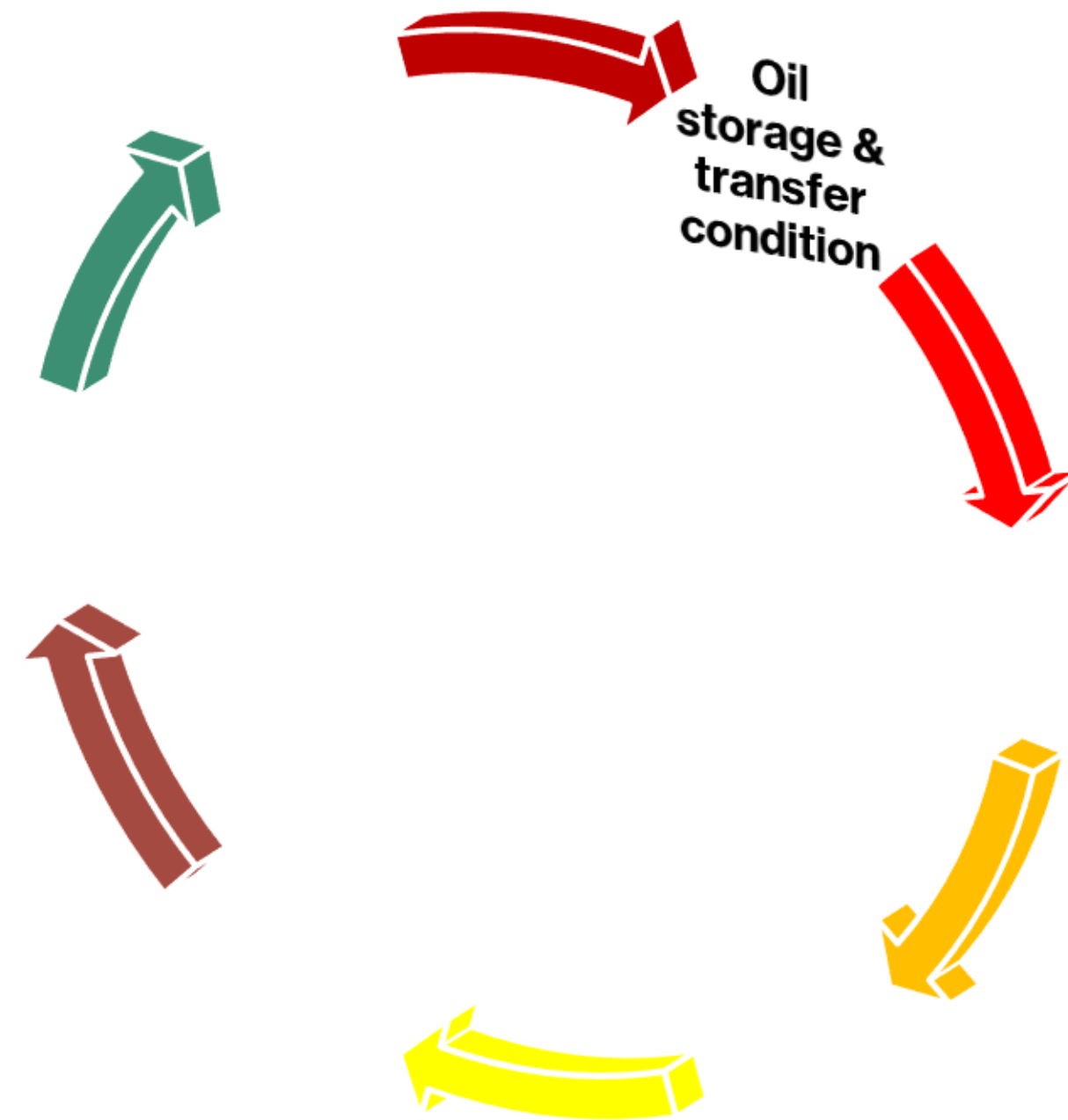


Mechanical Services

- Confined Space Entry
- Gas Safety (BA)
- High Pressure Water Jetting
- Hydro Milling

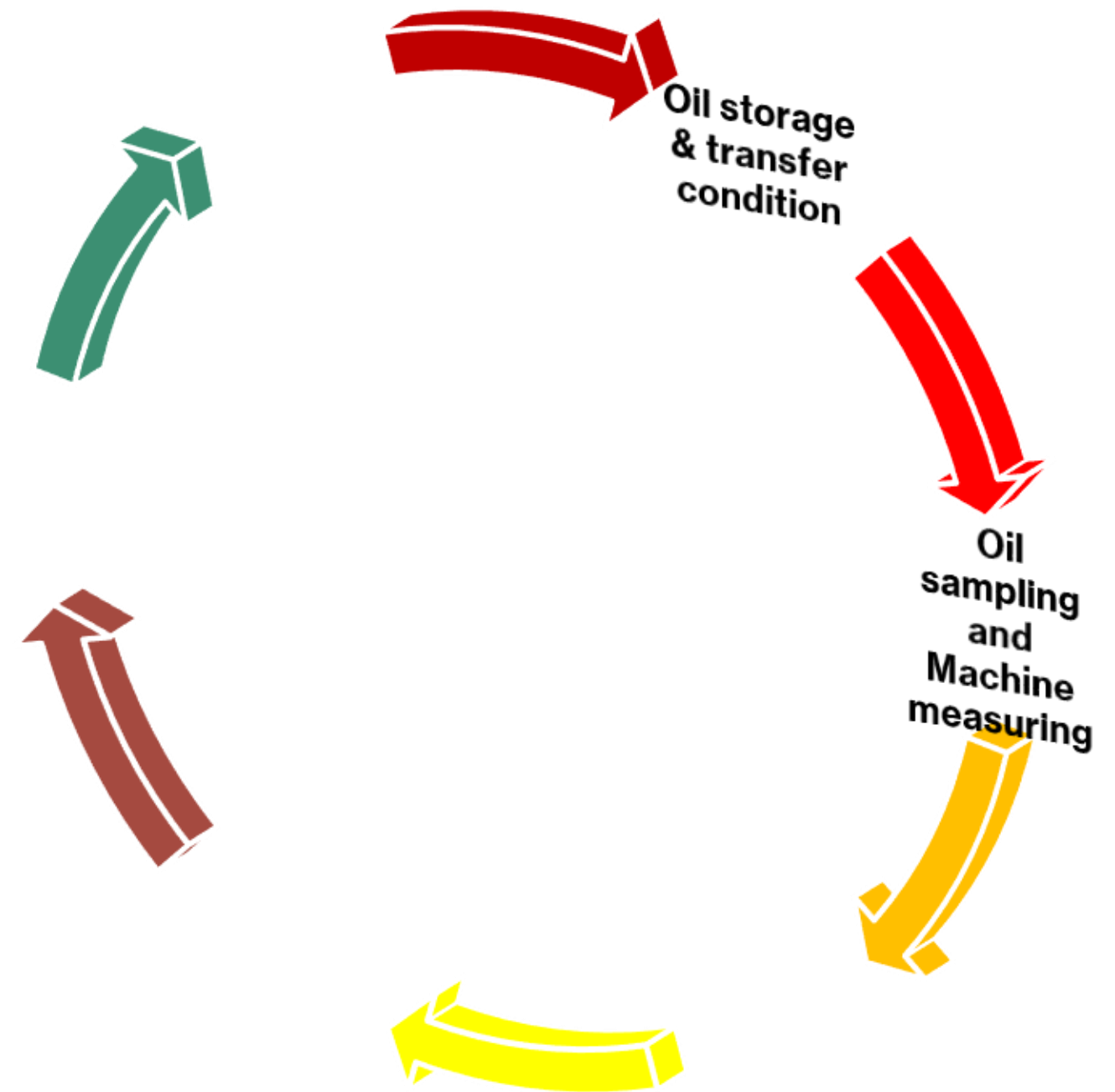
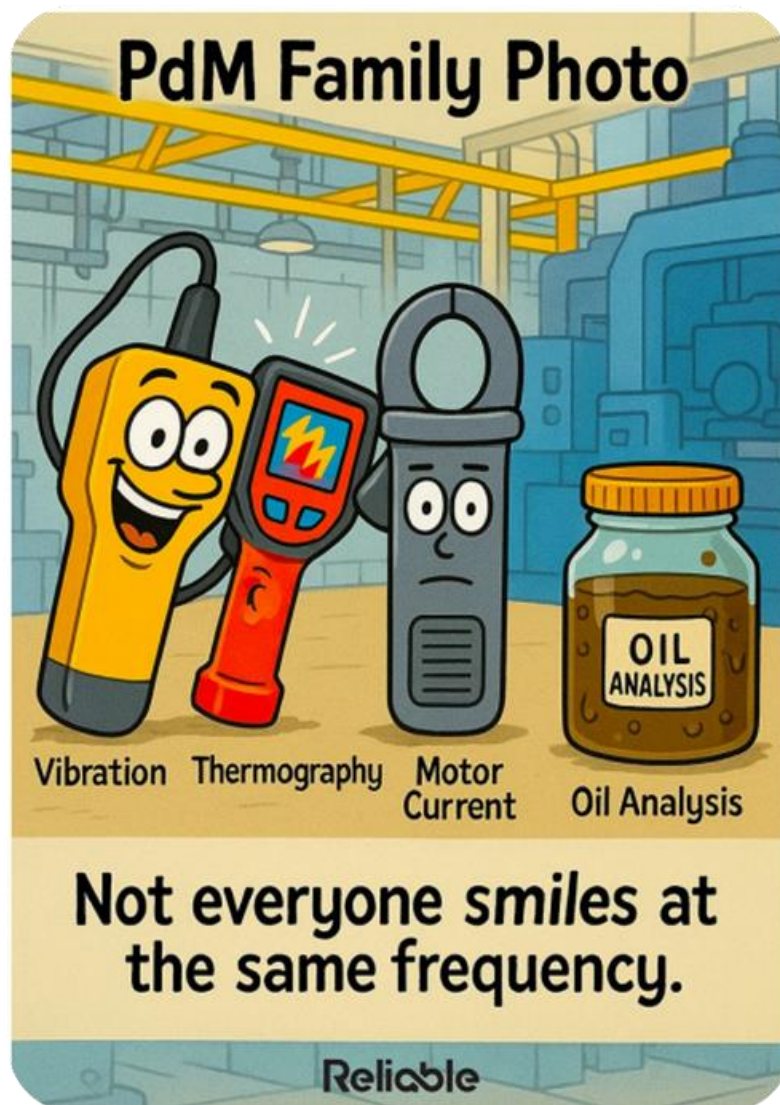
Cycle of Condition Monitoring

Monitor, Mitigate & Prevent



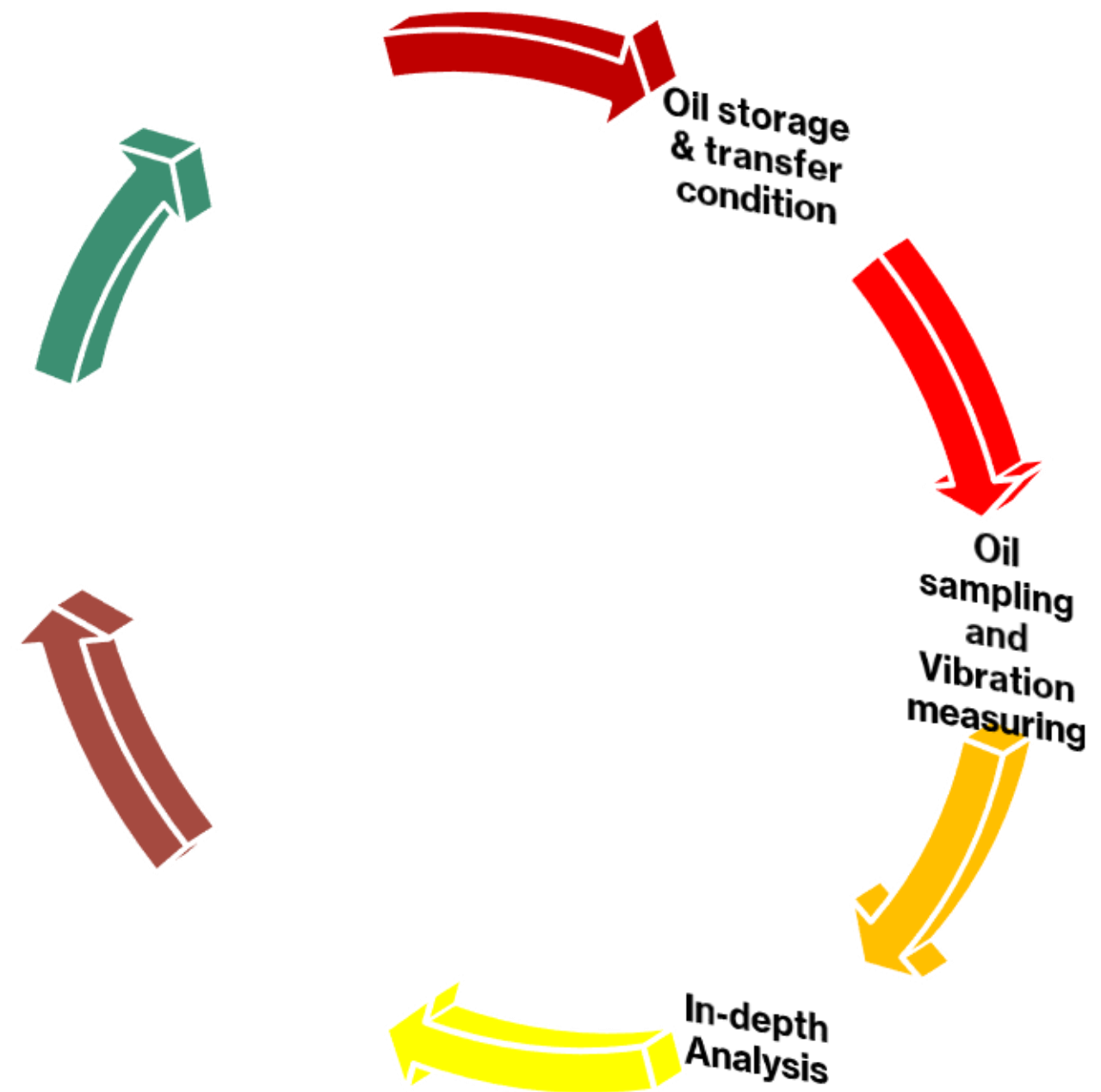
Cycle of Condition Monitoring

Monitor, Mitigate & Prevent



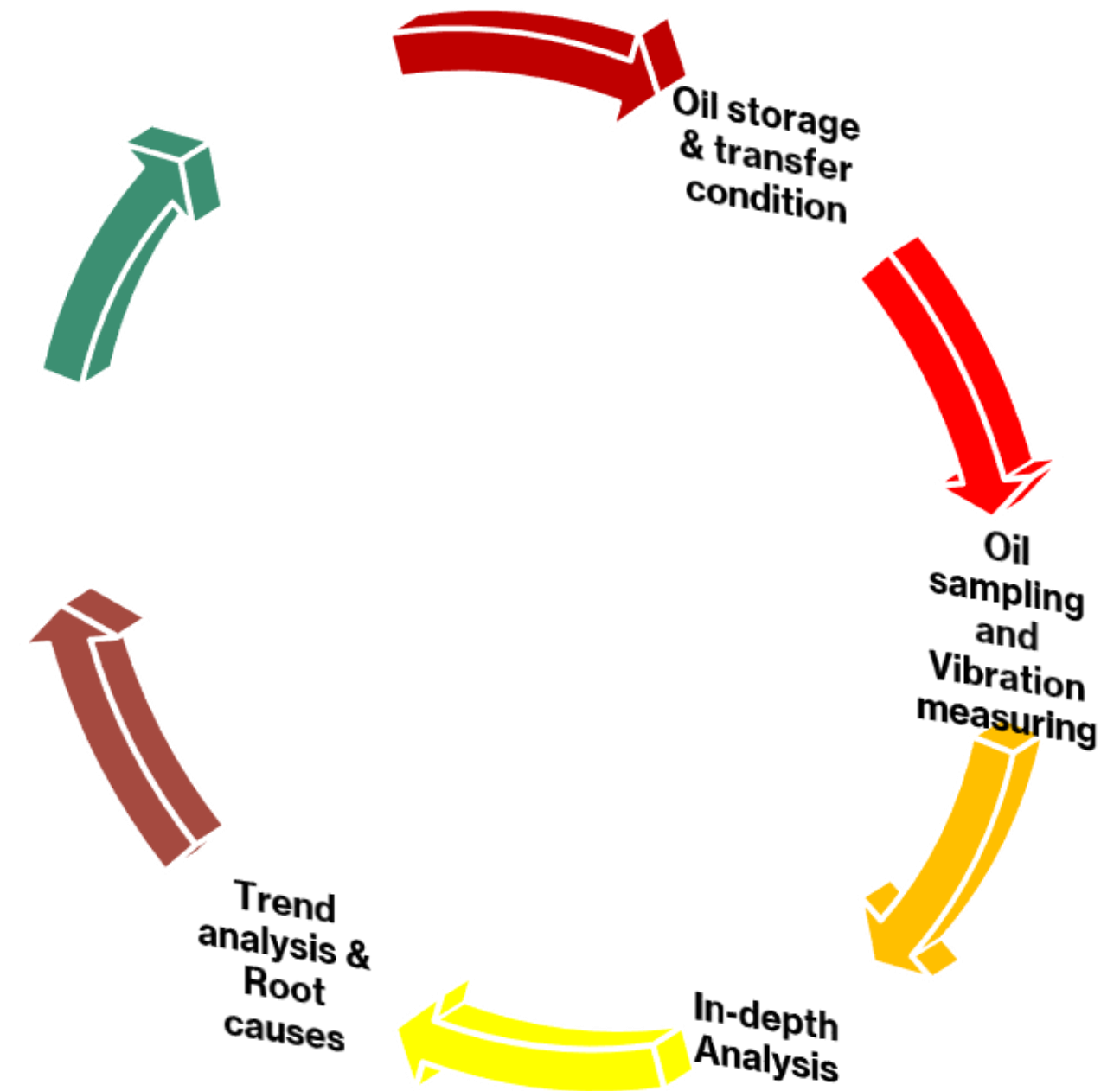
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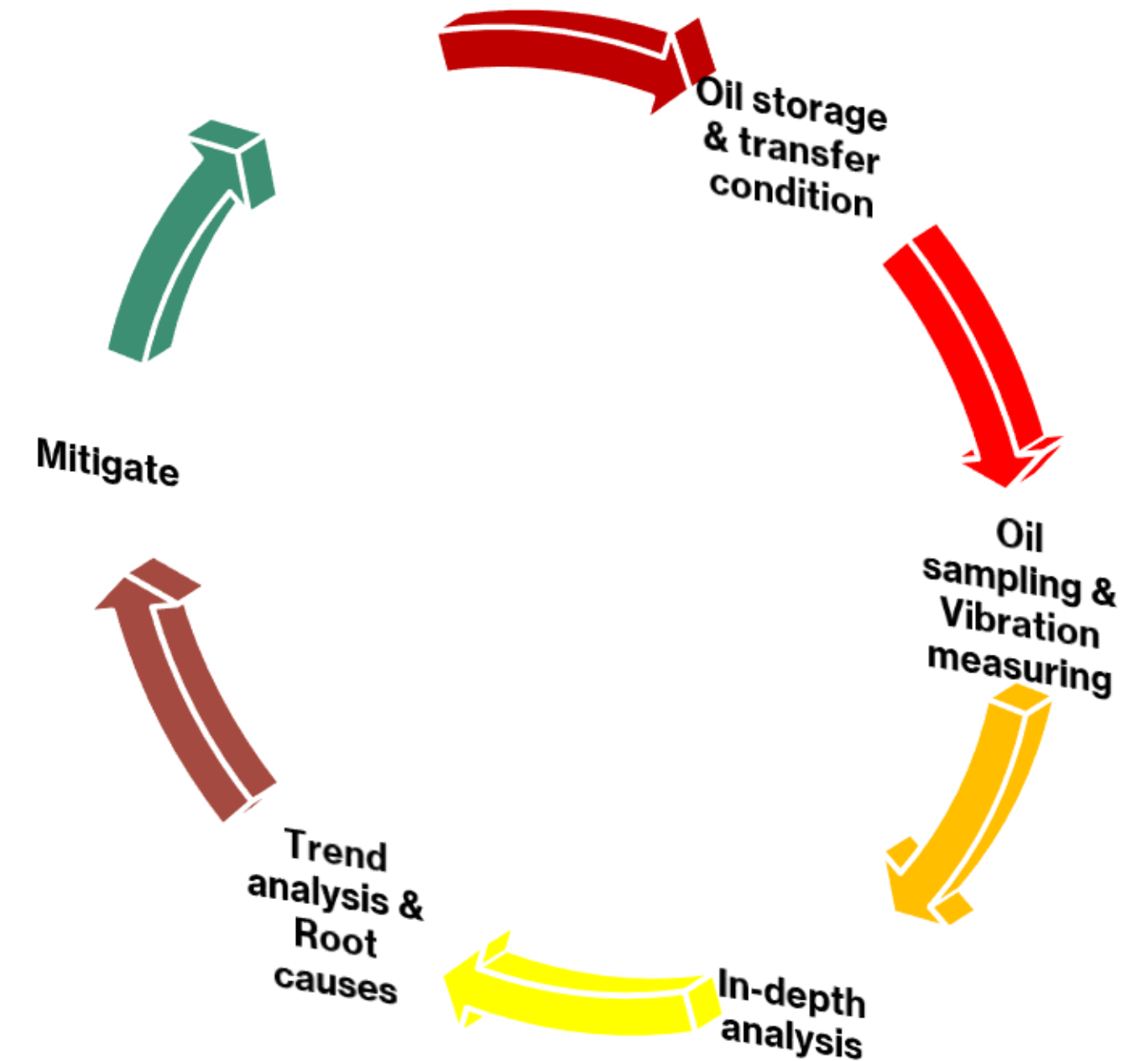
Cycle of Condition Monitoring

Monitor, Mitigate & Prevent



Cycle of Condition Monitoring

Monitor, Mitigate & Prevent



Cycle of Condition Monitoring

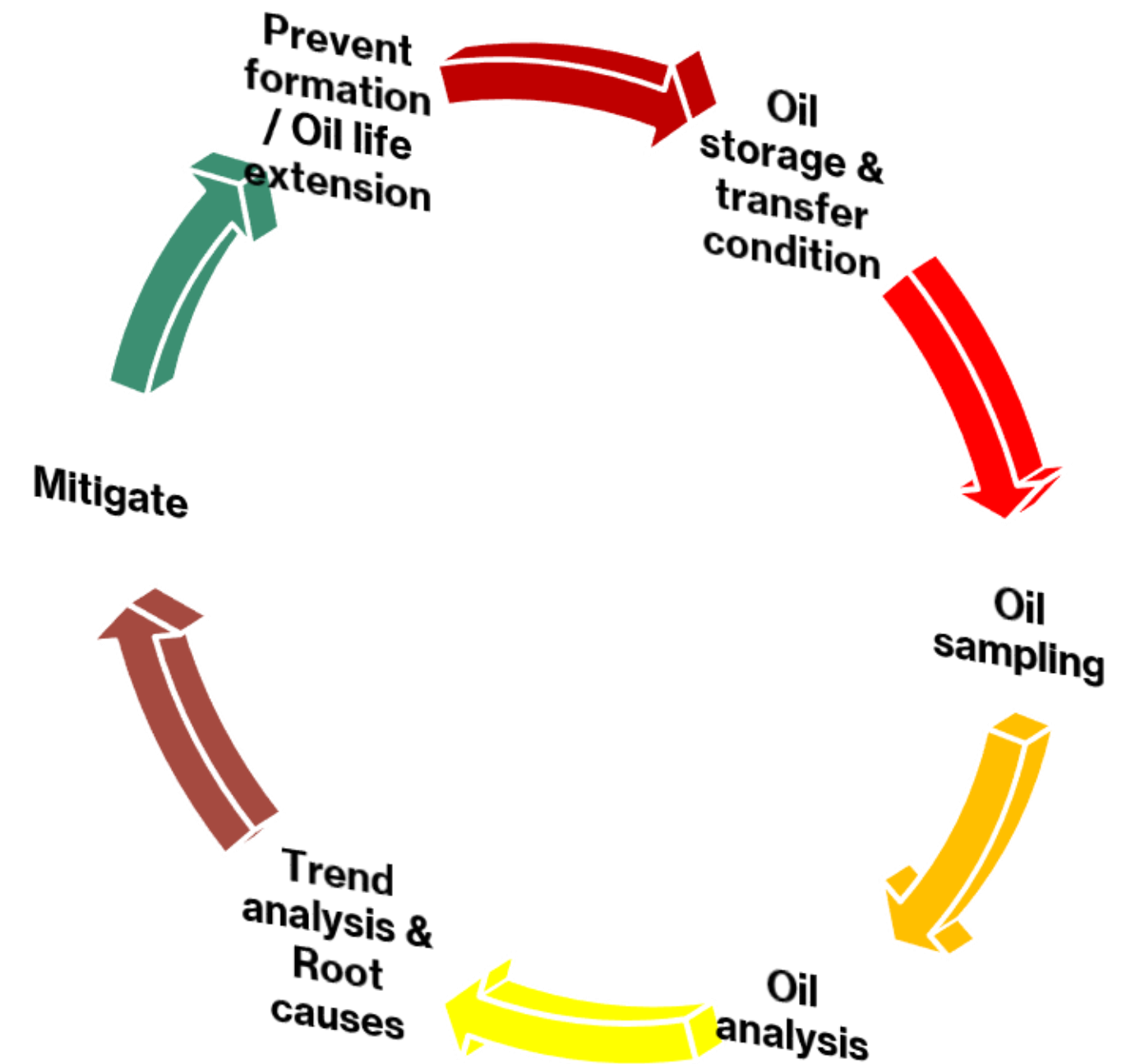
Monitor, Mitigate & Prevent



SOLVANCER
A PATENT PENDING TECHNOLOGY

- RECOMMENDED BY OEM.
- COMPATIBLE WITH DIFFERENT OIL TYPES AND GRADES.
- PRODUCE NO IMPACT ON THE CHEMISTRY OF IN-SERVICE OIL.
- DISSOLVES VARNISH AND PREVENTS FUTURE FORMATION.
- CONTROLS DEPOSITS.
- NO EQUIPMENT SHUTDOWN.
- NO OIL CHANGE.
- CLEANS THE OIL AND THE MACHINE.
- OIL LIFE EXTENSION.
- LEAVES NO RESIDUES WHEN IT DEGRADES.

Petrotec  **پتروٹک**

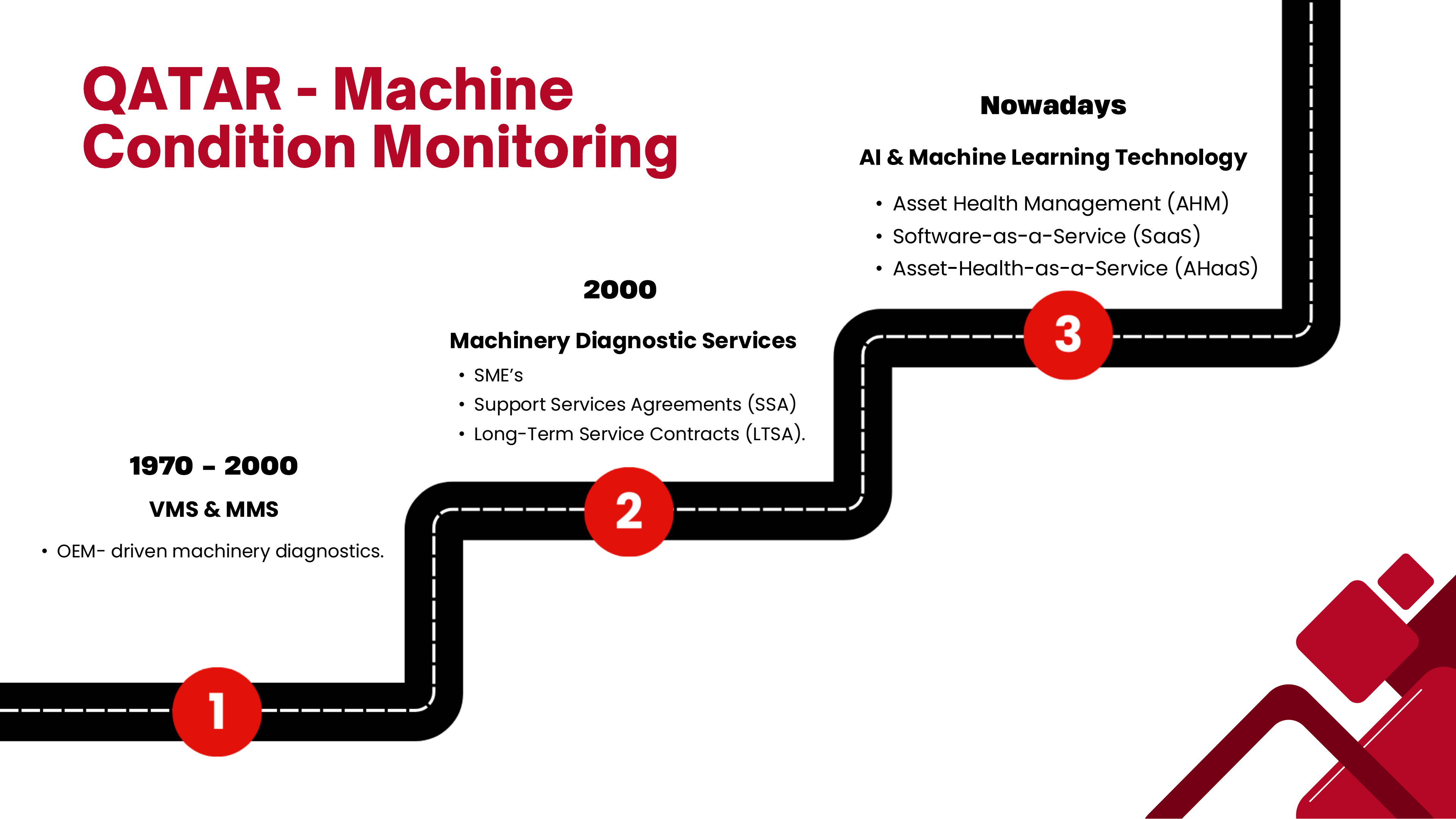




IS QATAR LISTENING TO THEIR OIL & MACHINES?



QATAR - Machine Condition Monitoring



1

2

3

QATAR - Oil Condition Monitoring

STANDARD ANALYSIS

- Reduced oil sampling frequency.
- “Critical” machines – Turbines.
- Symptoms of the machine

2012

2015

+RPVOT

- Increase of sampling frequency.
- Compressors added to the list of “Critical” machines.
- Selection of sampling point.

MPC & RULER

- + MPC & RULER – Yearly analysis
- Specific test suites created per machine.
- Grease analysis
- Trend analysis.

2017–2018

QATAR - Oil Condition Monitoring

DIVERSE PARAMETERS

- Gas and Steam Turbines.
- MPC & RULER frequently.
- Particle filtration Tenders.

LUBRICANT = ASSET

- Oil Care program.
- Application of latest technologies.
- Particle & Varnish filtration tenders.

2019

2020

2022

VARNISH POTENTIAL

- Root causes.
- Planned maintenance activities.
- Preventive actions.

QATAR

The pioneer of GCC
countries applying
ESP and **Solvancer**
Technologies
onshore & offshore

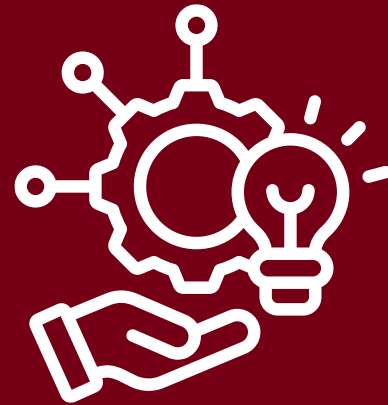
CASE STUDIES



CASE STUDY I



CHALLENGE

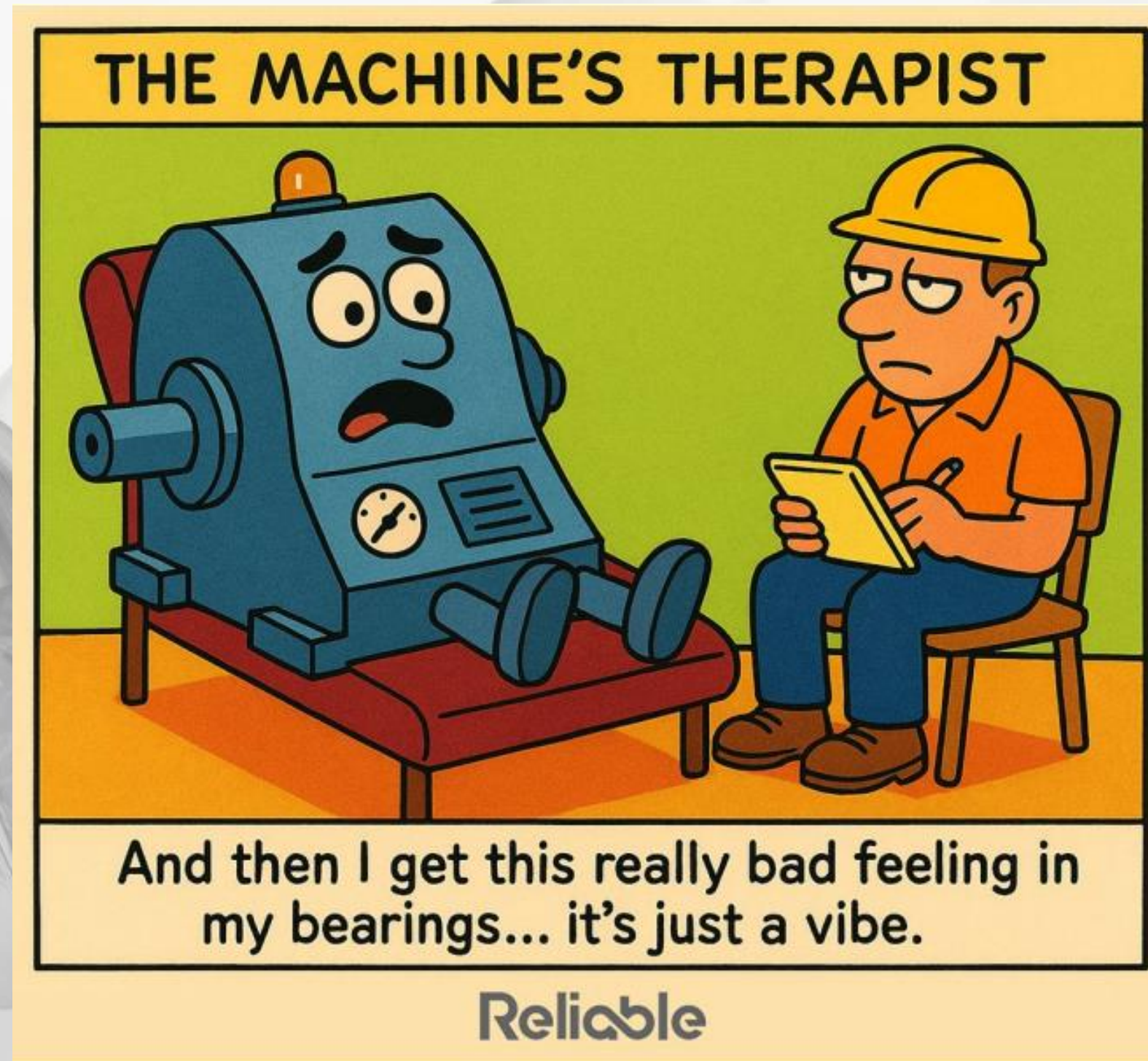


SOLUTION



RESULTS

CASE STUDY I



CASE STUDY I - Offshore Oil & Gas Operator



2017

What are the general issues faced by your company on turbo machinery / critical rotating equipment?



“When we analysed our lubricants condition monitoring database; the main challenges that we faced were **high temperature and vibration alarms** on our turbo machineries across the field on different platforms.”

- Senior Rotating Engineer,
Field Operations Department

Oil Care Program



Stage 1

Training of manpower, theory and practice, to know how to operate each machine.



Stage 2

Oil sampling and **analysis** following tri-monthly frequency. Build a **database** and follow the trends.



Stage 3

Along with **symptoms of each machine**, evaluate the **oil condition** and apply the correct solution depending on planned maintenance (oil change/upgrade or oil life extension).



Stage 4

Continue **monitoring the oil & the machine** and follow the trends of each parameter during and after applying the solution for each machine.

CASE STUDY I - Offshore Oil & Gas Operator



OIL LIFE EXTENSION

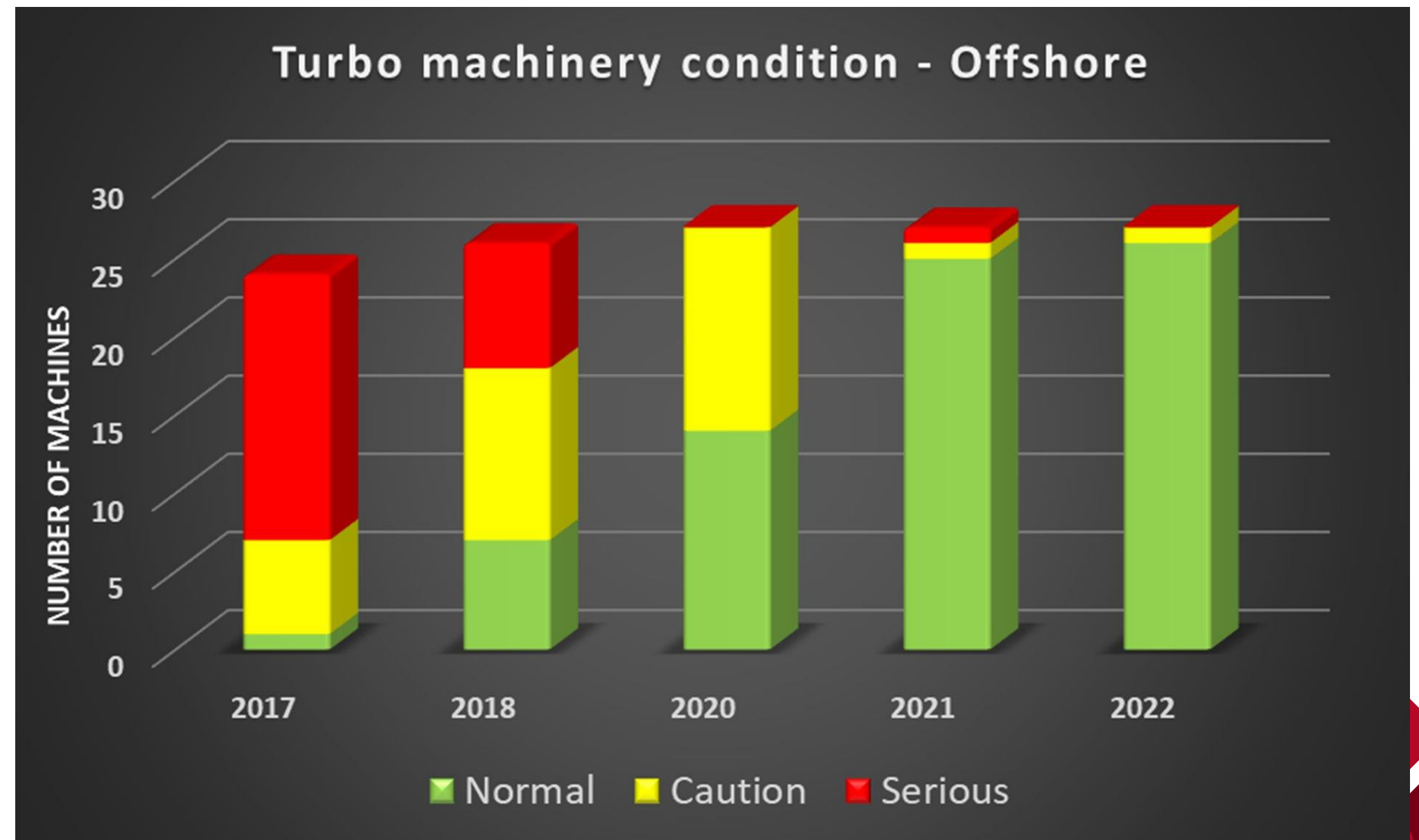
- ESP
- Solvancer
- ESP + Solvancer

OIL CHANGE

- ESP
- Solvancer
- ESP + Solvancer

CASE STUDY I - Offshore Oil & Gas Operator

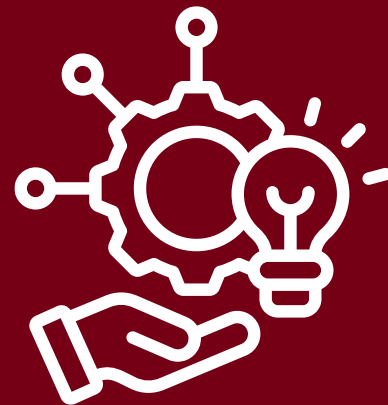
Oil condition within acceptable limits and **bearing temperature/vibration maintained below their warning limits**, allowing the systems to operate without any possibility of bearing failure.



CASE STUDY II



CHALLENGE



SOLUTION



RESULTS

CASE STUDY II - Power Plant



Challenge

- Level of **Antioxidants** and **RPVOT below 50%** for six (6) Siemens GTs
- Avoid a shutdown and a change of **120,000L** of oil



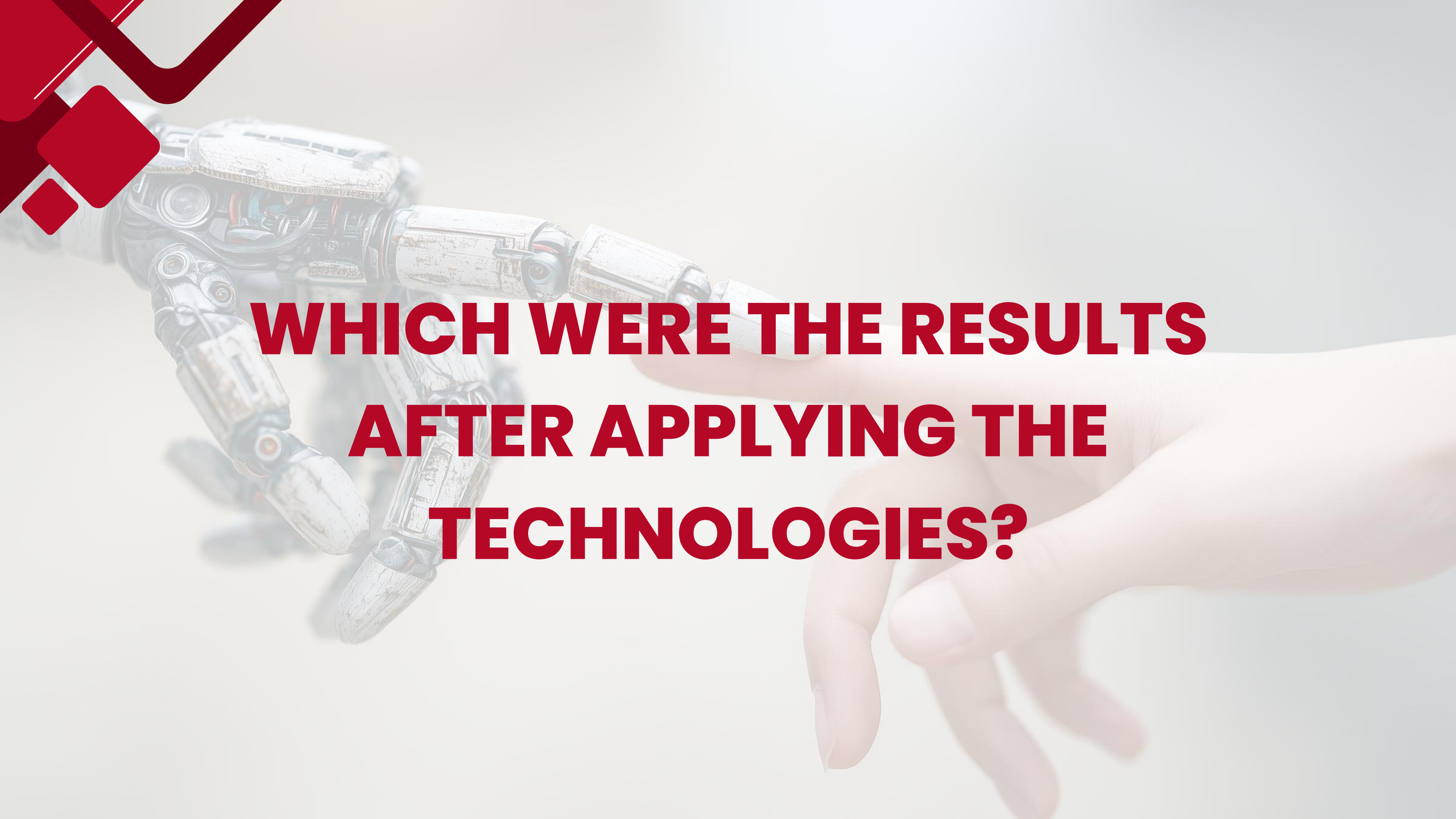
Solution

- **ESP** (Electrophysical Separation Process) filtration unit **and / or Solvancer** technology **with AO** flushing treatment.



Results

- **Antioxidant** and **RPVOT within the same level of a fresh oil** for long period, without shutting down the machines and avoiding a waste of 120,000L of oil.

The image features a close-up of a silver, articulated robotic hand on the left, reaching towards a human hand on the right. The background is a soft, out-of-focus light gray. In the top-left corner, there are several red geometric shapes, including squares and lines, some of which are semi-transparent. Overlaid on the center of the image is the text "WHICH WERE THE RESULTS AFTER APPLYING THE TECHNOLOGIES?" in a bold, red, sans-serif font.

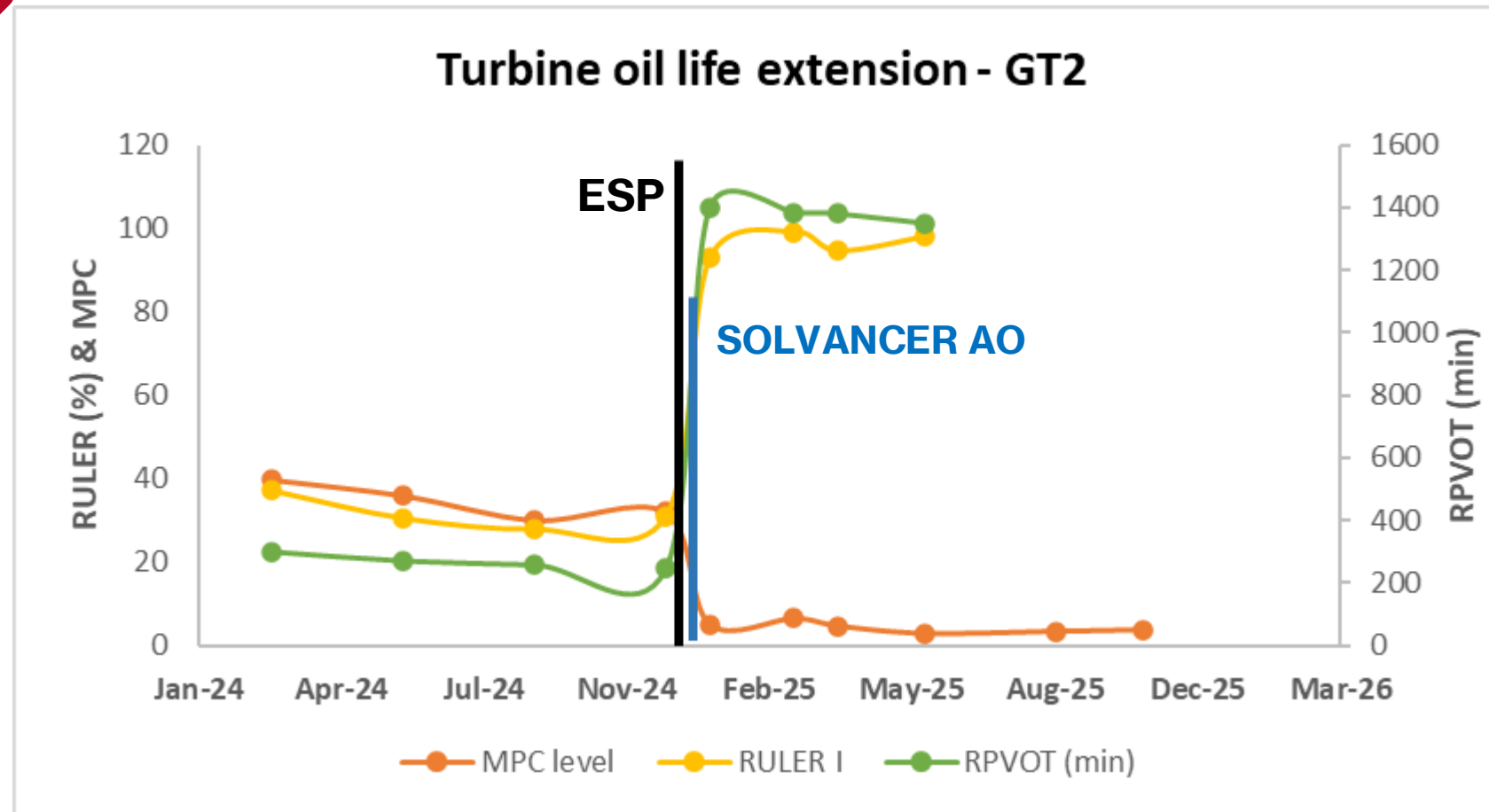
**WHICH WERE THE RESULTS
AFTER APPLYING THE
TECHNOLOGIES?**

CASE STUDY II - Power Plant

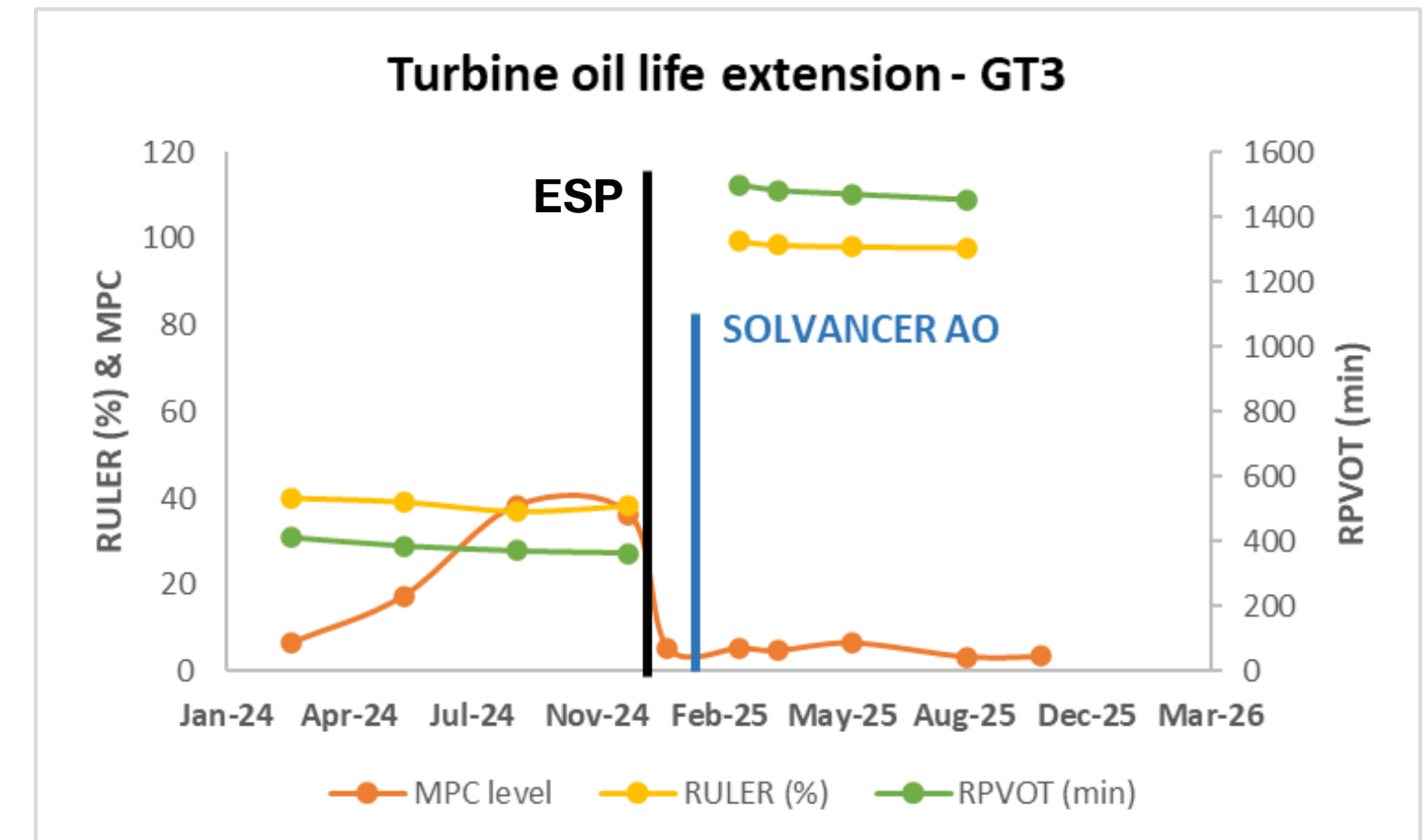
Parameter	Before	After Solvancer with AO				
	Day 0	Day 14	Day 28	Month 3	Month 6	Month 12
Viscosity	46.05	43.46	43.43	43.5	44.97	44.61
TAN	0.08	0.04	0.04	0.05	0.04	0.03
Particle Count	12/10/8	12/9/8	12/9/5	13/11/8	14/11/9	16/14/10
Varnish Potential	7.2	3.5	4.3	10	3.1	4.5
RULER - Amine (%)	44.1	98.8	96.4	98.7	96.4	96.9
RPVOT (min.)	416	>1000	>1000	>1000	>1000	>1000
Air Release (min.)	8.00	8.67	5.17	6.42	6.47	5.58
Foaming Tendency	50/0	40/0	20/0	10/0	20/0	20/0

GT1

CASE STUDY II - Power Plant



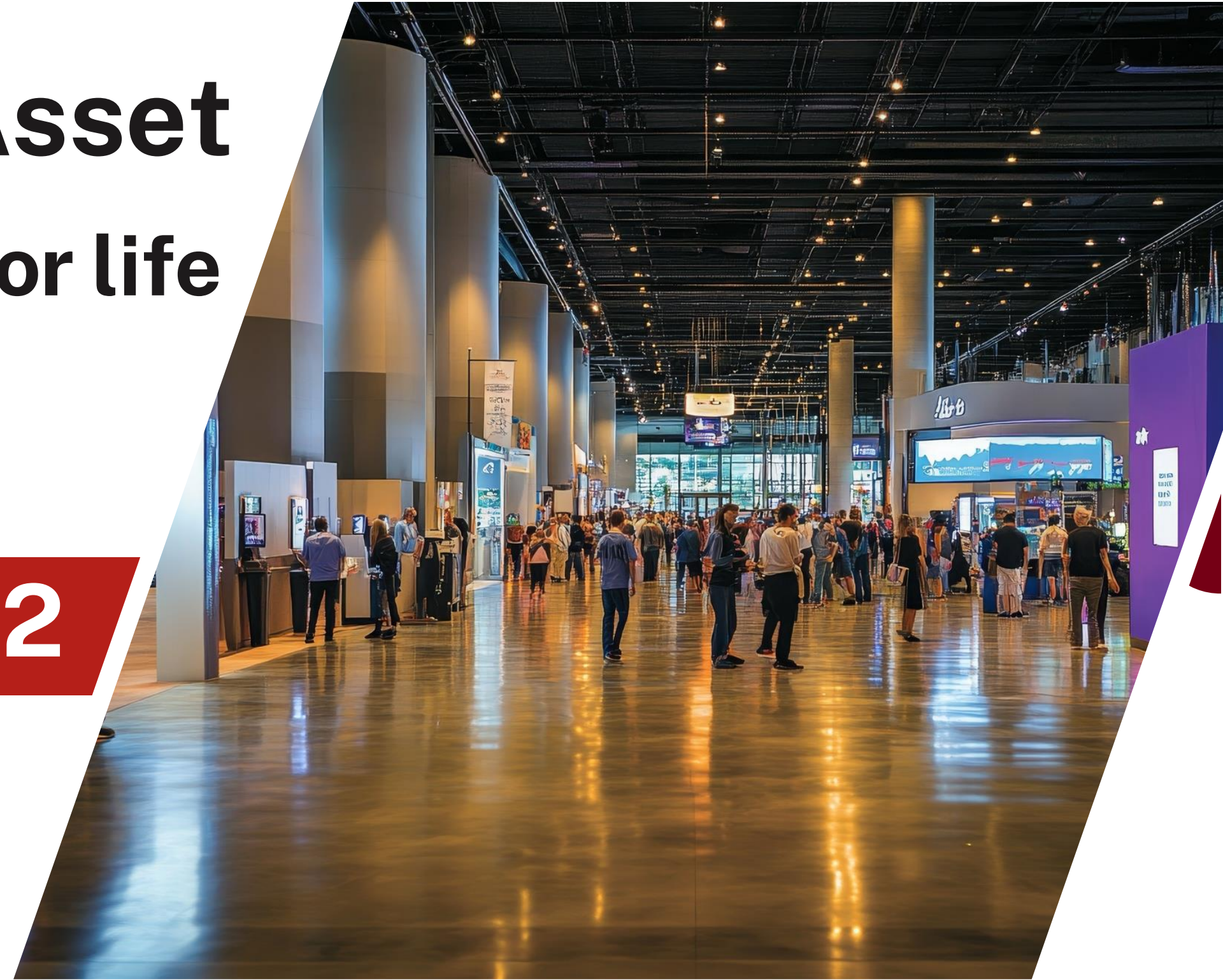
GT2



GT3

Lubricant Oils are an Asset
—— We strive to fill them for life

MEET US AT BOOTH 1102





Petrotec • بٲروٲٲك

Thank You For Your Attention



www.petrotec.com.qa



+97455095138



vanda@petrotec.com.qa

