

OIL ANALYSIS REPORT

**VOLVO
PENTA**

POWERSECURE VP-390174 - INDUSTRIAL - GENSET

Sample No: VPA049648

Oil Type: DIESEL ENGINE OIL SAE 30

SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | VPA049648 | --- | --- | --- |
| Sample Date | 18 Jul 2023 | --- | --- | --- |
| Machine Hours | 14 | --- | --- | --- |
| Oil Hours | 14 | --- | --- | --- |
| Oil Changed | Not Changd | --- | --- | --- |
| Sample Status | SEVERE | --- | --- | --- |

VOLVO PENTA - CORPORATE

1300 VOLVO PENTA DRIVE
CHESAPEAKE, VA
US 23320

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OIL CONDITION

| | | | | | |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C | cSt | ▲ 10.0 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | ■ 8.8 | --- | --- | --- |
| Oxidation (PA) | % | ■ 47 | --- | --- | --- |

CONTAMINATION

| | | | | | |
|----------------|-----|--------|-----|-----|-----|
| Soot % | % | ■ 0.1 | --- | --- | --- |
| Nitration (PA) | % | ■ 41 | --- | --- | --- |
| Sulfation (PA) | % | ■ 45 | --- | --- | --- |
| Glycol | % | ■ NEG | --- | --- | --- |
| Fuel | % | ◆ 12.4 | --- | --- | --- |
| Silicon | ppm | ■ 13 | --- | --- | --- |
| Sodium | ppm | ■ <1 | --- | --- | --- |
| Potassium | ppm | ■ <1 | --- | --- | --- |

Diagnosis

We advise that you check the fuel injection system. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

WEAR METALS

| | | | | | |
|------------|-----|------|-----|-----|-----|
| Iron | ppm | ■ <1 | --- | --- | --- |
| Copper | ppm | ■ 7 | --- | --- | --- |
| Lead | ppm | ■ 0 | --- | --- | --- |
| Tin | ppm | ■ <1 | --- | --- | --- |
| Aluminum | ppm | ■ 0 | --- | --- | --- |
| Chromium | ppm | ■ 0 | --- | --- | --- |
| Molybdenum | ppm | ■ 53 | --- | --- | --- |
| Nickel | ppm | ■ 0 | --- | --- | --- |
| Titanium | ppm | ■ 0 | --- | --- | --- |
| Silver | ppm | ■ 0 | --- | --- | --- |
| Manganese | ppm | ■ <1 | --- | --- | --- |
| Vanadium | ppm | <1 | --- | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | ■ 1052 | --- | --- | --- |
| Magnesium | ppm | ■ 805 | --- | --- | --- |
| Zinc | ppm | ■ 1114 | --- | --- | --- |
| Phosphorus | ppm | ■ 910 | --- | --- | --- |
| Barium | ppm | ■ 0 | --- | --- | --- |
| Boron | ppm | ■ 9 | --- | --- | --- |

Depot: VOLVOPENTA
Unique No: 10585774
Signed: Jonathan Hester
Report Date: 04 Aug 2023

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GRAPHS

