

OIL ANALYSIS REPORT

**VOLVO
PENTA**

70112037681 - PORT DIESEL ENGINE

Sample No: VPA056369

Oil Type: VOLVO

SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | VPA056369 | --- | --- | --- |
| Sample Date | 27 Nov 2023 | --- | --- | --- |
| Machine Hours | 135 | --- | --- | --- |
| Oil Hours | 0 | --- | --- | --- |
| Oil Changed | Not Changd | --- | --- | --- |
| Sample Status | ATTENTION | --- | --- | --- |

OIL CONDITION

| | | | | | |
|------------------|----------|------|-----|-----|-----|
| Visc @ 100°C | cSt | 10.6 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | 7.4 | --- | --- | --- |
| Oxidation (PA) | % | 60 | --- | --- | --- |

CONTAMINATION

| | | | | | |
|----------------|-----|------|-----|-----|-----|
| Water | % | NEG | --- | --- | --- |
| Soot % | % | 0.2 | --- | --- | --- |
| Nitration (PA) | % | 68 | --- | --- | --- |
| Sulfation (PA) | % | 52 | --- | --- | --- |
| Glycol | % | NEG | --- | --- | --- |
| Fuel | % | <1.0 | --- | --- | --- |
| Silicon | ppm | 45 | --- | --- | --- |
| Sodium | ppm | 5 | --- | --- | --- |
| Potassium | ppm | 3 | --- | --- | --- |

WEAR METALS

| | | | | | |
|------------|-----|-----|-----|-----|-----|
| Iron | ppm | 11 | --- | --- | --- |
| Copper | ppm | 136 | --- | --- | --- |
| Lead | ppm | 5 | --- | --- | --- |
| Tin | ppm | 2 | --- | --- | --- |
| Aluminum | ppm | 2 | --- | --- | --- |
| Chromium | ppm | 1 | --- | --- | --- |
| Molybdenum | ppm | 73 | --- | --- | --- |
| Nickel | ppm | <1 | --- | --- | --- |
| Titanium | ppm | <1 | --- | --- | --- |
| Silver | ppm | <1 | --- | --- | --- |
| Manganese | ppm | 2 | --- | --- | --- |
| Vanadium | ppm | <1 | --- | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|------|-----|-----|-----|
| Calcium | ppm | 1992 | --- | --- | --- |
| Magnesium | ppm | 97 | --- | --- | --- |
| Zinc | ppm | 1065 | --- | --- | --- |
| Phosphorus | ppm | 954 | --- | --- | --- |
| Barium | ppm | 0 | --- | --- | --- |
| Boron | ppm | 57 | --- | --- | --- |

ADVANCED YACHT SUPPORT

30197 MATTHEWSTOWN RD

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US 21601

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T:

F:

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). Metal levels are typical for a new component breaking in. Elemental level of silicon (Si) above normal indicating ingress of seal (break-in) material. The BN result indicates that there is suitable alkalinity remaining in the oil. Assuming 30W break-in oil, the condition of the oil is acceptable for the time in service.

Depot: VPADVEAS

Unique No: 10764022

Signed: Doug Bogart

Report Date: 29 Nov 2023

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GRAPHS

