

OIL ANALYSIS REPORT

VOLVO PENTA

BRUCE DYER VOLVO PENTA 2013754023 - PORT DIESEL ENGINE

Sample No: VPA031180
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-------------|-----|-----|
| Sample Number | VPA031180 | VPA037609 | --- | --- |
| Sample Date | 06 Dec 2023 | 18 Aug 2021 | --- | --- |
| Machine Hours | 1297 | 509 | --- | --- |
| Oil Hours | 0 | 70 | --- | --- |
| Oil Changed | Not Changd | Not Changd | --- | --- |
| Sample Status | NORMAL | NORMAL | --- | --- |

COASTAL CAROLINA YACHT SALES
145 LOCKWOOD BLVD
CHARLESTON, SC
US 29403
Contact: STEVE VASAS
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F:

OIL CONDITION

| | | | | | |
|------------------|----------|--------|--------|-----|-----|
| Visc @ 100°C | cSt | █ 13.7 | █ 13.5 | --- | --- |
| Base Number (BN) | mg KOH/g | █ 9.0 | --- | --- | --- |
| Oxidation (PA) | % | 59 | 65 | --- | --- |

CONTAMINATION

| | | | | | |
|----------------|-----|-------|-------|-----|-----|
| Water | % | NEG | NEG | --- | --- |
| Soot % | % | █ 0.3 | █ 0.1 | --- | --- |
| Nitration (PA) | % | 54 | 57 | --- | --- |
| Sulfation (PA) | % | 53 | 55 | --- | --- |
| Glycol | % | NEG | NEG | --- | --- |
| Fuel | % | <1.0 | <1.0 | --- | --- |
| Silicon | ppm | █ 4 | █ 8 | --- | --- |
| Sodium | ppm | █ <1 | █ 1 | --- | --- |
| Potassium | ppm | █ 2 | █ 2 | --- | --- |

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

WEAR METALS

| | | | | | |
|------------|-----|------|------|-----|-----|
| Iron | ppm | █ 8 | █ 14 | --- | --- |
| Copper | ppm | █ 1 | █ 46 | --- | --- |
| Lead | ppm | █ 0 | █ <1 | --- | --- |
| Tin | ppm | █ 0 | █ <1 | --- | --- |
| Aluminum | ppm | █ 1 | █ 0 | --- | --- |
| Chromium | ppm | █ <1 | █ <1 | --- | --- |
| Molybdenum | ppm | █ 47 | █ 62 | --- | --- |
| Nickel | ppm | █ 0 | █ 0 | --- | --- |
| Titanium | ppm | █ 0 | █ 0 | --- | --- |
| Silver | ppm | █ 0 | █ <1 | --- | --- |
| Manganese | ppm | █ 0 | █ <1 | --- | --- |
| Vanadium | ppm | 0 | 0 | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|--------|--------|-----|-----|
| Calcium | ppm | █ 1330 | █ 1085 | --- | --- |
| Magnesium | ppm | 560 | █ 941 | --- | --- |
| Zinc | ppm | █ 1126 | █ 1160 | --- | --- |
| Phosphorus | ppm | █ 969 | █ 1019 | --- | --- |
| Barium | ppm | █ 3 | █ 0 | --- | --- |
| Boron | ppm | █ 30 | █ 3 | --- | --- |

Depot: VP568144
Unique No: 10778819
Signed: Doug Bogart
Report Date: 11 Dec 2023

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PENTA**

GRAPHS

