

# OIL ANALYSIS REPORT

# VOLVO PENTA

**NADINE URUIOLI MAEFETERS 2300476 VOLVO PENTA 5102326857 - CENTER DIESEL ENGINE**

**Sample No:** VPA049572

**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

## SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | VPA049572   | --- | --- | --- |
| Sample Date   | 15 Sep 2023 | --- | --- | --- |
| Machine Hours | 0           | --- | --- | --- |
| Oil Hours     | 0           | --- | --- | --- |
| Oil Changed   | Changed     | --- | --- | --- |
| Sample Status | NORMAL      | --- | --- | --- |

## OIL CONDITION

|                  |          |        |     |     |     |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C     | cSt      | █ 14.1 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 9.1  | --- | --- | --- |
| Oxidation (PA)   | %        | 53     | --- | --- | --- |

## CONTAMINATION

|                |     |       |     |     |     |
|----------------|-----|-------|-----|-----|-----|
| Soot %         | %   | █ 0.1 | --- | --- | --- |
| Nitration (PA) | %   | 38    | --- | --- | --- |
| Sulfation (PA) | %   | 48    | --- | --- | --- |
| Glycol         | %   | NEG   | --- | --- | --- |
| Fuel           | %   | <1.0  | --- | --- | --- |
| Silicon        | ppm | █ 5   | --- | --- | --- |
| Sodium         | ppm | █ <1  | --- | --- | --- |
| Potassium      | ppm | █ 1   | --- | --- | --- |

## WEAR METALS

|            |     |      |     |     |     |
|------------|-----|------|-----|-----|-----|
| Iron       | ppm | █ 3  | --- | --- | --- |
| Copper     | ppm | █ 6  | --- | --- | --- |
| Lead       | ppm | █ <1 | --- | --- | --- |
| Tin        | ppm | █ <1 | --- | --- | --- |
| Aluminum   | ppm | █ 0  | --- | --- | --- |
| Chromium   | ppm | █ <1 | --- | --- | --- |
| Molybdenum | ppm | █ 56 | --- | --- | --- |
| Nickel     | ppm | █ 0  | --- | --- | --- |
| Titanium   | ppm | █ <1 | --- | --- | --- |
| Silver     | ppm | █ 0  | --- | --- | --- |
| Manganese  | ppm | █ <1 | --- | --- | --- |
| Vanadium   | ppm | <1   | --- | --- | --- |

## ADDITIVES

|            |     |        |     |     |     |
|------------|-----|--------|-----|-----|-----|
| Calcium    | ppm | █ 1025 | --- | --- | --- |
| Magnesium  | ppm | █ 957  | --- | --- | --- |
| Zinc       | ppm | █ 1155 | --- | --- | --- |
| Phosphorus | ppm | █ 923  | --- | --- | --- |
| Barium     | ppm | █ 0    | --- | --- | --- |
| Boron      | ppm | █ 7    | --- | --- | --- |

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F: x:

## 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.

**Depot:** VP152741  
**Unique No:** 10661543  
**Signed:** Doug Bogart  
**Report Date:** 26 Sep 2023

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## GRAPHS

