

# OIL ANALYSIS REPORT

# VOLVO PENTA

**MISS DODIE MISS DODIE NORTHERN LIGHTS 6732-47759C - GENSET**

**Sample No:** VPA058270

**Oil Type:** CHEVRON DELO 400 MULTIGRADE 15W40

## SAMPLE INFORMATION

|               |             |             |     |     |
|---------------|-------------|-------------|-----|-----|
| Sample Number | VPA058270   | VPA038516   | --- | --- |
| Sample Date   | 08 Nov 2023 | 06 Oct 2021 | --- | --- |
| Machine Hours | 148         | 127         | --- | --- |
| Oil Hours     | 148         | 0           | --- | --- |
| Oil Changed   | Changed     | N/A         | --- | --- |
| Sample Status | NORMAL      | ATTENTION   | --- | --- |

## OIL CONDITION

|                  |          |        |        |     |     |
|------------------|----------|--------|--------|-----|-----|
| Visc @ 100°C     | cSt      | █ 13.5 | █ 14.2 | --- | --- |
| Base Number (BN) | mg KOH/g | █ 8.5  | ---    | --- | --- |
| Oxidation (PA)   | %        | 48     | 51     | --- | --- |

## CONTAMINATION

|                |     |       |       |     |     |
|----------------|-----|-------|-------|-----|-----|
| Water          | %   | NEG   | NEG   | --- | --- |
| Soot %         | %   | █ 0.1 | █ 0.1 | --- | --- |
| Nitration (PA) | %   | 53    | 55    | --- | --- |
| Sulfation (PA) | %   | 48    | 50    | --- | --- |
| Glycol         | %   | NEG   | NEG   | --- | --- |
| Fuel           | %   | <1.0  | <1.0  | --- | --- |
| Silicon        | ppm | █ 5   | █ 4   | --- | --- |
| Sodium         | ppm | █ 5   | █ 10  | --- | --- |
| Potassium      | ppm | █ 2   | █ 2   | --- | --- |

## WEAR METALS

|            |     |      |      |     |     |
|------------|-----|------|------|-----|-----|
| Iron       | ppm | █ 53 | ▲ 57 | --- | --- |
| Copper     | ppm | █ <1 | █ 0  | --- | --- |
| Lead       | ppm | █ 1  | █ <1 | --- | --- |
| Tin        | ppm | █ <1 | █ 0  | --- | --- |
| Aluminum   | ppm | █ 3  | █ 4  | --- | --- |
| Chromium   | ppm | █ <1 | █ 1  | --- | --- |
| Molybdenum | ppm | 0    | <1   | --- | --- |
| Nickel     | ppm | █ <1 | █ 0  | --- | --- |
| Titanium   | ppm | <1   | <1   | --- | --- |
| Silver     | ppm | █ 0  | 0    | --- | --- |
| Manganese  | ppm | █ <1 | <1   | --- | --- |
| Vanadium   | ppm | <1   | <1   | --- | --- |

## ADDITIVES

|            |     |        |      |     |     |
|------------|-----|--------|------|-----|-----|
| Calcium    | ppm | █ 1227 | 1284 | --- | --- |
| Magnesium  | ppm | █ 676  | 654  | --- | --- |
| Zinc       | ppm | █ 799  | 788  | --- | --- |
| Phosphorus | ppm | █ 680  | 661  | --- | --- |
| Barium     | ppm | █ 0    | 0    | --- | --- |
| Boron      | ppm | █ 91   | 92   | --- | --- |

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## 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:** VP179089  
**Unique No:** 10749747  
**Signed:** Sean Felton  
**Report Date:** 20 Nov 2023

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## GRAPHS

