

# OIL ANALYSIS REPORT

# VOLVO PENTA

## WESTERBEKE A69673TC - GENSET

Sample No: VPA062230

Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40

### SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | VPA062230   | --- | --- | --- |
| Sample Date   | 16 May 2024 | --- | --- | --- |
| Machine Hours | 29          | --- | --- | --- |
| Oil Hours     | 10          | --- | --- | --- |
| Oil Changed   | Changed     | --- | --- | --- |
| Sample Status | NORMAL      | --- | --- | --- |

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### OIL CONDITION

|                  |          |        |     |     |     |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C     | cSt      | █ 13.3 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 7.8  | --- | --- | --- |
| Oxidation (PA)   | %        | 43     | --- | --- | --- |

### 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.

### CONTAMINATION

|                |     |       |     |     |     |
|----------------|-----|-------|-----|-----|-----|
| Water          | %   | NEG   | --- | --- | --- |
| Soot %         | %   | █ 0.1 | --- | --- | --- |
| Nitration (PA) | %   | 49    | --- | --- | --- |
| Sulfation (PA) | %   | 45    | --- | --- | --- |
| Glycol         | %   | NEG   | --- | --- | --- |
| Fuel           | %   | < 1.0 | --- | --- | --- |
| Silicon        | ppm | █ 35  | --- | --- | --- |
| Sodium         | ppm | █ 4   | --- | --- | --- |
| Potassium      | ppm | █ 5   | --- | --- | --- |

### WEAR METALS

|            |     |       |     |     |     |
|------------|-----|-------|-----|-----|-----|
| Iron       | ppm | █ 6   | --- | --- | --- |
| Copper     | ppm | █ 3   | --- | --- | --- |
| Lead       | ppm | █ < 1 | --- | --- | --- |
| Tin        | ppm | █ 1   | --- | --- | --- |
| Aluminum   | ppm | █ 3   | --- | --- | --- |
| Chromium   | ppm | █ < 1 | --- | --- | --- |
| Molybdenum | ppm | 18    | --- | --- | --- |
| Nickel     | ppm | █ < 1 | --- | --- | --- |
| Titanium   | ppm | < 1   | --- | --- | --- |
| Silver     | ppm | █ 1   | --- | --- | --- |
| Manganese  | ppm | █ 1   | --- | --- | --- |
| Vanadium   | ppm | < 1   | --- | --- | --- |

### ADDITIVES

|            |     |        |     |     |     |
|------------|-----|--------|-----|-----|-----|
| Calcium    | ppm | █ 1395 | --- | --- | --- |
| Magnesium  | ppm | █ 610  | --- | --- | --- |
| Zinc       | ppm | █ 831  | --- | --- | --- |
| Phosphorus | ppm | █ 703  | --- | --- | --- |
| Barium     | ppm | █ 2    | --- | --- | --- |
| Boron      | ppm | █ 84   | --- | --- | --- |

**Depot:** VP179089  
**Unique No:** 11048541  
**Signed:** Angela Borella  
**Report Date:** 29 May 2024

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## GRAPHS

