

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GREGORY KING SAM VOLVO PENTA A1179900 - STARBOARD DIESEL ENGINE

Sample No: VPA059334

Oil Type: VOLVO PENTA SAE 15W40

### SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | VPA059334   | --- | --- | --- |
| Sample Date   | 27 Nov 2023 | --- | --- | --- |
| Machine Hours | 127         | --- | --- | --- |
| Oil Hours     | 127         | --- | --- | --- |
| Oil Changed   | Changed     | --- | --- | --- |
| Sample Status | NORMAL      | --- | --- | --- |

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### OIL CONDITION

|                  |          |        |     |     |     |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C     | cSt      | █ 13.1 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 9.1  | --- | --- | --- |
| Oxidation (PA)   | %        | 62     | --- | --- | --- |

### 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 %         | %   | █ 0.3 | --- | --- | --- |
| Nitration (PA) | %   | 48    | --- | --- | --- |
| Sulfation (PA) | %   | 61    | --- | --- | --- |
| Glycol         | %   | NEG   | --- | --- | --- |
| Fuel           | %   | < 1.0 | --- | --- | --- |
| Silicon        | ppm | █ 10  | --- | --- | --- |
| Sodium         | ppm | █ 10  | --- | --- | --- |
| Potassium      | ppm | █ 58  | --- | --- | --- |

### WEAR METALS

|            |     |       |     |     |     |
|------------|-----|-------|-----|-----|-----|
| Iron       | ppm | █ 107 | --- | --- | --- |
| Copper     | ppm | █ 32  | --- | --- | --- |
| Lead       | ppm | █ 0   | --- | --- | --- |
| Tin        | ppm | █ 3   | --- | --- | --- |
| Aluminum   | ppm | █ 35  | --- | --- | --- |
| Chromium   | ppm | █ 2   | --- | --- | --- |
| Molybdenum | ppm | █ 55  | --- | --- | --- |
| Nickel     | ppm | █ 0   | --- | --- | --- |
| Titanium   | ppm | █ 0   | --- | --- | --- |
| Silver     | ppm | █ 0   | --- | --- | --- |
| Manganese  | ppm | █ 11  | --- | --- | --- |
| Vanadium   | ppm | 0     | --- | --- | --- |

### ADDITIVES

|            |     |        |     |     |     |
|------------|-----|--------|-----|-----|-----|
| Calcium    | ppm | █ 1762 | --- | --- | --- |
| Magnesium  | ppm | █ 644  | --- | --- | --- |
| Zinc       | ppm | █ 1062 | --- | --- | --- |
| Phosphorus | ppm | █ 824  | --- | --- | --- |
| Barium     | ppm | █ 0    | --- | --- | --- |
| Boron      | ppm | █ 17   | --- | --- | --- |

Depot: VP794951  
Unique No: 10777216  
Signed: Angela Borella  
Report Date: 08 Dec 2023

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## GRAPHS

