

# OIL ANALYSIS REPORT



**KEITH WILLIAMS GB6018 PANDA 2000750 - PORT GENSET**

**Sample No:** VPA053007  
**Oil Type:** SHELL 15W40

## SAMPLE INFORMATION

|               |                    |             |     |     |
|---------------|--------------------|-------------|-----|-----|
| Sample Number | <b>VPA053007</b>   | VPA049757   | --- | --- |
| Sample Date   | <b>03 May 2024</b> | 14 Dec 2023 | --- | --- |
| Machine Hours | <b>576</b>         | 480         | --- | --- |
| Oil Hours     | <b>50</b>          | 100         | --- | --- |
| Oil Changed   | <b>Changed</b>     | Changed     | --- | --- |
| Sample Status | <b>NORMAL</b>      | NORMAL      | --- | --- |

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## OIL CONDITION

|                  |          |             |      |     |     |
|------------------|----------|-------------|------|-----|-----|
| Visc @ 100°C     | cSt      | <b>13.0</b> | 13.1 | --- | --- |
| Base Number (BN) | mg KOH/g | <b>8.8</b>  | 7.6  | --- | --- |
| Oxidation (PA)   | %        | <b>64</b>   | 67   | --- | --- |

## CONTAMINATION

|                |     |                |      |     |     |
|----------------|-----|----------------|------|-----|-----|
| Water          | %   | <b>NEG</b>     | NEG  | --- | --- |
| Soot %         | %   | <b>0.1</b>     | 0.1  | --- | --- |
| Nitration (PA) | %   | <b>54</b>      | 57   | --- | --- |
| Sulfation (PA) | %   | <b>53</b>      | 55   | --- | --- |
| Glycol         | %   | <b>NEG</b>     | NEG  | --- | --- |
| Fuel           | %   | <b>&lt;1.0</b> | <1.0 | --- | --- |
| Silicon        | ppm | <b>6</b>       | 9    | --- | --- |
| Sodium         | ppm | <b>0</b>       | <1   | --- | --- |
| Potassium      | ppm | <b>4</b>       | 5    | --- | --- |

## Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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 | <b>4</b>     | 5  | --- | --- |
| Copper     | ppm | <b>2</b>     | 0  | --- | --- |
| Lead       | ppm | <b>&lt;1</b> | 0  | --- | --- |
| Tin        | ppm | <b>&lt;1</b> | <1 | --- | --- |
| Aluminum   | ppm | <b>2</b>     | 2  | --- | --- |
| Chromium   | ppm | <b>&lt;1</b> | 0  | --- | --- |
| Molybdenum | ppm | <b>38</b>    | 0  | --- | --- |
| Nickel     | ppm | <b>0</b>     | 0  | --- | --- |
| Titanium   | ppm | <b>&lt;1</b> | 0  | --- | --- |
| Silver     | ppm | <b>0</b>     | 0  | --- | --- |
| Manganese  | ppm | <b>&lt;1</b> | 0  | --- | --- |
| Vanadium   | ppm | <b>&lt;1</b> | 0  | --- | --- |

## ADDITIVES

|            |     |             |      |     |     |
|------------|-----|-------------|------|-----|-----|
| Calcium    | ppm | <b>1726</b> | 2277 | --- | --- |
| Magnesium  | ppm | <b>393</b>  | 39   | --- | --- |
| Zinc       | ppm | <b>1170</b> | 1205 | --- | --- |
| Phosphorus | ppm | <b>1089</b> | 1007 | --- | --- |
| Barium     | ppm | <b>2</b>    | 0    | --- | --- |
| Boron      | ppm | <b>92</b>   | 159  | --- | --- |

**Depot:** VP531377  
**Unique No:** 11022884  
**Signed:** Sean Felton  
**Report Date:** 14 May 2024

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

