

# OIL ANALYSIS REPORT

# VOLVO PENTA

**NADINE URCIUOLI NICK MULFORD VOLVO PENTA 3200003677 - STARBOARD IPS**

**Sample No:** VPA054845

**Oil Type:** VOLVO API GL-5 SAE 75W90

## SAMPLE INFORMATION

|               |                    |             |     |     |
|---------------|--------------------|-------------|-----|-----|
| Sample Number | <b>VPA054845</b>   | VPA052154   | --- | --- |
| Sample Date   | <b>23 May 2024</b> | 12 Feb 2024 | --- | --- |
| Machine Hours | <b>100</b>         | 55          | --- | --- |
| Oil Hours     | <b>55</b>          | 55          | --- | --- |
| Oil Changed   | <b>Not Changd</b>  | Not Changd  | --- | --- |
| Sample Status | <b>NORMAL</b>      | NORMAL      | --- | --- |

### Helmut's Marine Service

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T: x:

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## OIL CONDITION

|             |     |              |     |     |     |
|-------------|-----|--------------|-----|-----|-----|
| Visc @ 40°C | cSt | <b>105.7</b> | 106 | --- | --- |
|-------------|-----|--------------|-----|-----|-----|

## CONTAMINATION

|           |     |            |     |     |     |
|-----------|-----|------------|-----|-----|-----|
| Water     | %   | <b>NEG</b> | NEG | --- | --- |
| Silicon   | ppm | <b>3</b>   | <1  | --- | --- |
| Sodium    | ppm | <b>2</b>   | 0   | --- | --- |
| Potassium | ppm | <b>3</b>   | 2   | --- | --- |

## 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 condition of the oil is acceptable for the time in service.

## WEAR METALS

|            |     |              |    |     |     |
|------------|-----|--------------|----|-----|-----|
| PQ         |     | <b>23</b>    | 17 | --- | --- |
| Iron       | ppm | <b>20</b>    | 14 | --- | --- |
| Copper     | ppm | <b>3</b>     | 2  | --- | --- |
| Lead       | ppm | <b>&lt;1</b> | 0  | --- | --- |
| Tin        | ppm | <b>&lt;1</b> | 0  | --- | --- |
| Aluminum   | ppm | <b>&lt;1</b> | 2  | --- | --- |
| Chromium   | ppm | <b>0</b>     | <1 | --- | --- |
| Molybdenum | ppm | <b>0</b>     | 0  | --- | --- |
| Nickel     | ppm | <b>&lt;1</b> | 0  | --- | --- |
| Titanium   | ppm | <b>0</b>     | <1 | --- | --- |
| Silver     | ppm | <b>0</b>     | 0  | --- | --- |
| Manganese  | ppm | <b>2</b>     | 2  | --- | --- |
| Vanadium   | ppm | <b>0</b>     | 0  | --- | --- |

## ADDITIVES

|            |     |             |      |     |     |
|------------|-----|-------------|------|-----|-----|
| Calcium    | ppm | <b>11</b>   | 12   | --- | --- |
| Magnesium  | ppm | <b>149</b>  | 132  | --- | --- |
| Zinc       | ppm | <b>0</b>    | 0    | --- | --- |
| Phosphorus | ppm | <b>1442</b> | 1362 | --- | --- |
| Barium     | ppm | <b>0</b>    | 10   | --- | --- |
| Boron      | ppm | <b>365</b>  | 330  | --- | --- |

**Depot:** VP152741

**Unique No:** 11047665

**Signed:** Doug Bogart

**Report Date:** 24 May 2024

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## GRAPHS

