

# OIL ANALYSIS REPORT

# VOLVO PENTA

## PHILIP HASBROUCK VOLVO PENTA 3940022270 - PORT IPS

Sample No: VPA055990

Oil Type: VOLVO API GL-5 SAE 75W90

### SAMPLE INFORMATION

|               |             |             |     |     |
|---------------|-------------|-------------|-----|-----|
| Sample Number | VPA055990   | VPA023749   | --- | --- |
| Sample Date   | 13 Oct 2023 | 16 Apr 2019 | --- | --- |
| Machine Hours | 554         | 85          | --- | --- |
| Oil Hours     | 0           | 85          | --- | --- |
| Oil Changed   | Not Changd  | Not Changd  | --- | --- |
| Sample Status | NORMAL      | NORMAL      | --- | --- |

### MARINE DIESEL SERVICES INC

1711 WHITTIER AVE, SUITE B  
COSTA MESA, CA  
US 92627  
Contact: BEN ALMAZAN  
marinedieselservices@outlook.com  
T: (949)612-8180  
F: x:

### OIL CONDITION

|             |     |     |        |     |     |
|-------------|-----|-----|--------|-----|-----|
| Visc @ 40°C | cSt | 106 | ■ 97.6 | --- | --- |
|-------------|-----|-----|--------|-----|-----|

### CONTAMINATION

|           |     |     |      |     |     |
|-----------|-----|-----|------|-----|-----|
| Silicon   | ppm | 10  | 10   | --- | --- |
| Sodium    | ppm | ■ 9 | ■ 4  | --- | --- |
| Potassium | ppm | ■ 1 | ■ <1 | --- | --- |

### 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         |     | ■ 18 | ■ 26 | --- | --- |
| Iron       | ppm | ■ 51 | ■ 31 | --- | --- |
| Copper     | ppm | 9    | 6    | --- | --- |
| Lead       | ppm | 0    | 0    | --- | --- |
| Tin        | ppm | 0    | 0    | --- | --- |
| Aluminum   | ppm | <1   | 2    | --- | --- |
| Chromium   | ppm | ■ <1 | ■ <1 | --- | --- |
| Molybdenum | ppm | ■ 0  | ■ 0  | --- | --- |
| Nickel     | ppm | ■ 1  | ■ <1 | --- | --- |
| Titanium   | ppm | 0    | <1   | --- | --- |
| Silver     | ppm | 0    | 0    | --- | --- |
| Manganese  | ppm | ■ <1 | ■ 4  | --- | --- |
| Vanadium   | ppm | 0    | 0    | --- | --- |

### ADDITIVES

|            |     |        |        |     |     |
|------------|-----|--------|--------|-----|-----|
| Calcium    | ppm | ■ 4    | ■ 24   | --- | --- |
| Magnesium  | ppm | ■ 0    | ■ 1039 | --- | --- |
| Zinc       | ppm | ■ 5    | ■ 13   | --- | --- |
| Phosphorus | ppm | ■ 1293 | ■ 1636 | --- | --- |
| Barium     | ppm | ■ 0    | ■ <1   | --- | --- |
| Boron      | ppm | ■ 292  | ■ 548  | --- | --- |

Depot: VP288530  
Unique No: 10697285  
Signed: Don Baldrige  
Report Date: 18 Oct 2023

# OIL ANALYSIS REPORT

**VOLVO  
PENTA**

## GRAPHS

