

# OIL ANALYSIS REPORT

# VOLVO PENTA

## RICHARD CANNY VOLVO PENTA A186556 - STARBOARD DIESEL ENGINE

Sample No: VPA042456

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

### SAMPLE INFORMATION

|               |             |             |     |     |
|---------------|-------------|-------------|-----|-----|
| Sample Number | VPA042456   | VPA028521   | --- | --- |
| Sample Date   | 15 Feb 2023 | 24 Feb 2022 | --- | --- |
| Machine Hours | 372         | 307         | --- | --- |
| Oil Hours     | 0           | 0           | --- | --- |
| Oil Changed   | Changed     | Changed     | --- | --- |
| Sample Status | ABNORMAL    | NORMAL      | --- | --- |

Jefferson Beach Yacht Sales Inc

24400 Jefferson Ave.

SAINT CLAIR SHORES, MI

US 48080

Contact: DENNIS BUTT

dbutt@jbys.com

T: (866)490-5297

F:

### OIL CONDITION

|                  |          |        |        |     |     |
|------------------|----------|--------|--------|-----|-----|
| Visc @ 100°C     | cSt      | █ 14.5 | █ 13.4 | --- | --- |
| Base Number (BN) | mg KOH/g | █ 9.9  | █ 8.9  | --- | --- |
| Oxidation (PA)   | %        | 57     | 51     | --- | --- |

### Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Chromium and iron ppm levels are abnormal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil.

### CONTAMINATION

|                |     |       |       |     |     |
|----------------|-----|-------|-------|-----|-----|
| Water          | %   | NEG   | NEG   | --- | --- |
| Soot %         | %   | █ 1.7 | █ 0.5 | --- | --- |
| Nitration (PA) | %   | 70    | 48    | --- | --- |
| Sulfation (PA) | %   | 63    | 48    | --- | --- |
| Glycol         | %   | NEG   | NEG   | --- | --- |
| Fuel           | %   | <1.0  | <1.0  | --- | --- |
| Silicon        | ppm | █ 16  | █ 8   | --- | --- |
| Sodium         | ppm | █ 5   | █ 3   | --- | --- |
| Potassium      | ppm | █ 6   | █ <1  | --- | --- |

### WEAR METALS

|            |     |       |      |     |     |
|------------|-----|-------|------|-----|-----|
| Iron       | ppm | ▲ 307 | █ 65 | --- | --- |
| Copper     | ppm | █ 36  | █ 11 | --- | --- |
| Lead       | ppm | █ 3   | █ 2  | --- | --- |
| Tin        | ppm | █ 3   | █ 2  | --- | --- |
| Aluminum   | ppm | █ 45  | █ 15 | --- | --- |
| Chromium   | ppm | ▲ 22  | █ 5  | --- | --- |
| Molybdenum | ppm | █ 59  | █ 57 | --- | --- |
| Nickel     | ppm | █ 6   | █ 1  | --- | --- |
| Titanium   | ppm | █ <1  | █ <1 | --- | --- |
| Silver     | ppm | █ <1  | █ <1 | --- | --- |
| Manganese  | ppm | █ 3   | █ <1 | --- | --- |
| Vanadium   | ppm | 0     | <1   | --- | --- |

### ADDITIVES

|            |     |        |        |     |     |
|------------|-----|--------|--------|-----|-----|
| Calcium    | ppm | █ 1063 | █ 1033 | --- | --- |
| Magnesium  | ppm | █ 949  | █ 939  | --- | --- |
| Zinc       | ppm | █ 1226 | █ 1113 | --- | --- |
| Phosphorus | ppm | █ 1087 | █ 997  | --- | --- |
| Barium     | ppm | █ 0    | █ 0    | --- | --- |
| Boron      | ppm | █ 34   | █ 12   | --- | --- |

Depot: VP297371

Unique No: 10351213

Signed: Angela Borella

Report Date: 27 Feb 2023

# OIL ANALYSIS REPORT



## GRAPHS

