



## WINDSERVE VOLVO PENTA 10132167580 - STARBOARD DIESEL ENGINE

Sample No: VPA045095

**Oil Type:** VOLVO PENTA SAE 15W40

| SAMPLE INFORMAT  | TION     |               |      |  |
|------------------|----------|---------------|------|--|
| Sample Number    |          | VPA045095     | <br> |  |
| Sample Date      |          | 18 Aug 2023   | <br> |  |
| Machine Hours    |          | 16 Aug 2023   |      |  |
| Oil Hours        |          | 1             |      |  |
|                  |          |               | <br> |  |
| Oil Changed      |          | Changed       | <br> |  |
| Sample Status    |          | SEVERE        | <br> |  |
| OIL CONDITION    |          |               |      |  |
| Visc @ 100°C     | cSt      | <b>12.95</b>  | <br> |  |
| Base Number (BN) | mg KOH/g | <b>10.0</b>   | <br> |  |
| Oxidation (PA)   | %        | 72            | <br> |  |
| CONTAMINATION    |          |               |      |  |
| CONTAMINATION    |          |               |      |  |
| Soot %           | %        | ■0            | <br> |  |
| Nitration (PA)   | %        | 43            | <br> |  |
| Sulfation (PA)   | %        | 56            | <br> |  |
| Glycol           | %        | NEG           | <br> |  |
| Fuel             | %        | <1.0          | <br> |  |
| Silicon          | ppm      | <b>16</b>     | <br> |  |
| Sodium           | ppm      | ■3            | <br> |  |
| Potassium        | ppm      | <b>■</b> 3    | <br> |  |
| WEAR METALS      |          |               |      |  |
| WEAK METAES      |          |               |      |  |
| Iron             | ppm      | <b>■</b> 2    | <br> |  |
| Copper           | ppm      | <b>2</b>      | <br> |  |
| Lead             | ppm      | <b>0</b>      | <br> |  |
| Tin              | ppm      | <b>■&lt;1</b> | <br> |  |
| Aluminum         | ppm      | <b>0</b>      | <br> |  |
| Chromium         | ppm      | <b>■</b> 0    | <br> |  |
| Molybdenum       | ppm      | <b>44</b>     | <br> |  |
| Nickel           | ppm      | <b>■</b> 0    | <br> |  |
| Titanium         | ppm      | <u> </u>      | <br> |  |
| Silver           | ppm      | _<br>0        | <br> |  |
| Manganese        | ppm      | <b>1</b>      | <br> |  |
| Vanadium         | ppm      | <1            | <br> |  |
| ADDITIVES        |          |               |      |  |
|                  |          | = 4705        |      |  |
| Calcium          | ppm      | <b>■</b> 1725 | <br> |  |
| Magnesium        | ppm      | ■389          | <br> |  |
| Zinc             | ppm      | <b>1069</b>   | <br> |  |
| Phosphorus       | ppm      | ■ 885         | <br> |  |
| Barium           | ppm      | □0            | <br> |  |
| Boron            | ppm      | <b>■</b> 76   | <br> |  |
|                  |          |               |      |  |

## **SENESCO MARINE**

10 MACNAUGHT ST NORTH KINGSTOWN, RI US 02852 Contact: CLAUDINO LUCIANO cluciano@senescomarine.com T:

## Diagnosis

F:

Oil and filter change at the time of sampling has been noted.All component wear rates are normal. There is a high amount of particulates present in the oil. The condition of the oil is acceptable for the time in service.

Depot:VPSENNORUnique No:10609071Signed:Doug BogartReport Date:21 Aug 2023

## **OIL ANALYSIS REPORT**





