## **OIL ANALYSIS REPORT**

## 1829 VOLVO PENTA 2013532789 - STARBOARD DIESEL ENGINE

Sample No: VPA059295

Oil Type: VOLVO PENTA SAE 15W40

## SAMPLE INFORMATION

| Sample Number  |        | VPA059295   | <br> |  |
|----------------|--------|-------------|------|--|
| Sample Date    |        | 01 Apr 2024 | <br> |  |
| Machine Hours  |        | 0           | <br> |  |
| Oil Hours      |        | 0           | <br> |  |
| Oil Changed    |        | Not Changd  | <br> |  |
| Sample Status  |        | NORMAL      | <br> |  |
| OIL CONDITION  |        |             |      |  |
| Visc @ 100°C   | cSt    | 13.38       | <br> |  |
| Oxidation (PA) | %      | 55          | <br> |  |
| CONTAMINATION  |        |             |      |  |
| Water          | %      | NEG         | <br> |  |
| Soot %         | %      | 0.2         | <br> |  |
| Nitration (PA) | %      | 46          | <br> |  |
| Sulfation (PA) | %      | 52          | <br> |  |
|                |        |             |      |  |
| Glycol         | %      | NEG         | <br> |  |
| Glycol<br>Fuel | %<br>% | NEG<br><1.0 | <br> |  |
| -              |        |             |      |  |
| Fuel           | %      | <1.0        | <br> |  |

#### WEAR METALS

| Iron       | ppm | 5            | <br> |  |
|------------|-----|--------------|------|--|
| Copper     | ppm | 2            | <br> |  |
| Lead       | ppm | 0            | <br> |  |
| Tin        | ppm | □<1          | <br> |  |
| Aluminum   | ppm | 2            | <br> |  |
| Chromium   | ppm | <b></b> <1   | <br> |  |
| Molybdenum | ppm | 63           | <br> |  |
| Nickel     | ppm | 0            | <br> |  |
| Titanium   | ppm | <b></b> <1   | <br> |  |
| Silver     | ppm | <b>  </b> <1 | <br> |  |
| Manganese  | ppm | <b></b> <1   | <br> |  |
| Vanadium   | ppm | <1           | <br> |  |

#### ADDITIVES

| Calcium    | ppm | <b>1071</b> | <br> |  |
|------------|-----|-------------|------|--|
| Magnesium  | ppm | 916         | <br> |  |
| Zinc       | ppm | <b>1167</b> | <br> |  |
| Phosphorus | ppm | <b>1025</b> | <br> |  |
| Barium     | ppm | ■ <1        | <br> |  |
| Boron      | ppm | 9           | <br> |  |

#### SMART DIESEL SERVICE

102 NW 133RD AVE, UNIT 103 PLANTATION, FL US 33325 Contact: ANDRES GARMENDIA smartdieselservice@gmail.com T: (954)258-8100 F:

#### Diagnosis

No corrective action is recommended at this time. 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.

 Depot:
 VPSMAPLA

 Unique No:
 10968322

 Signed:
 Doug Bogart

 Report Date:
 09 Apr 2024

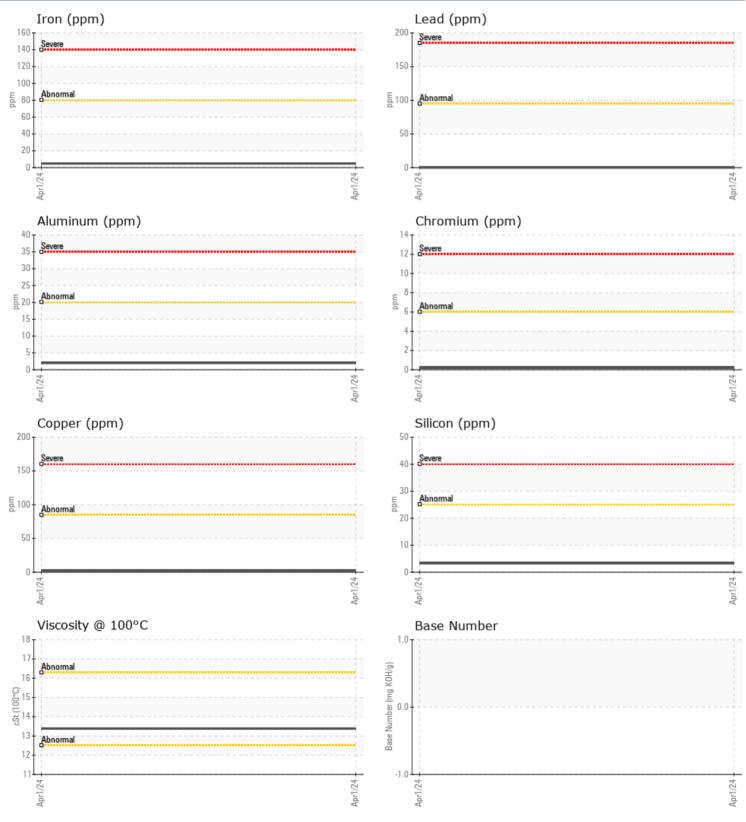
Contact/Location: ANDRES GARMENDIA - VPSMAPLA



# **OIL ANALYSIS REPORT**



#### GRAPHS



Report Id: VPSMAPLA [WUSCAR] 06143514 (Generated: 04/09/2024 16:10:11) Rev: 1

Contact/Location: ANDRES GARMENDIA - VPSMAPLA