



JAMES E CARLSON VOLVO PENTA A 1054031 - STARBOARD DIESEL ENGINE

Sample No: VPA044720

Oil Type: SHELL ROTELLA T4 15W40

| | | | | |
|------------------|----------|-------------|------|--|
| SAMPLE INFORMAT | TION | | | |
| Sample Number | | VPA044720 | | |
| Sample Date | | 25 Oct 2022 | | |
| Machine Hours | | 207 | | |
| Oil Hours | | 75 | | |
| | | | | |
| Oil Changed | | Changed | | |
| Sample Status | | ATTENTION | | |
| OIL CONDITION | | | | |
| Visc @ 100°C | cSt | 14.4 | | |
| Base Number (BN) | mg KOH/g | ■8.1 | | |
| Oxidation (PA) | % | 68 | | |
| CONTAMINATION | | | | |
| Soot % | % | ■0.6 | | |
| Nitration (PA) | % | 73 | | |
| | | 57 | | |
| Sulfation (PA) | % | | | |
| Glycol | % | NEG | | |
| Fuel | % | <1.0 | | |
| Silicon | ppm | 19 | | |
| Sodium | ppm | ■8 | | |
| Potassium | ppm | 13 | | |
| WEAR METALS | | | | |
| Iron | ppm | △ 93 | | |
| Copper | ppm | ■20 | | |
| Lead | ppm | 4 | | |
| Tin | ppm | 2 | | |
| Aluminum | ppm | 19 | | |
| Chromium | ppm | 6 | | |
| Molybdenum | | ■ 15 | | |
| Nickel | ppm | <u> </u> | | |
| | ppm | _ | | |
| Titanium | ppm | 1 <1 | | |
| Silver | ppm | 0 | | |
| Manganese | ppm | ■ <1 | | |
| Vanadium | ppm | 0 | | |
| ADDITIVES | | | | |
| Calcium | ppm | 2070 | | |
| Magnesium | ppm | 164 | | |
| Zinc | ppm | 1184 | | |
| Phosphorus | ppm | 1026 | | |
| Barium | ppm | 0 | | |
| Boron | ppm | 142 | | |
| | 1. P | | | |

Point Judith Marina

360 Gooseberry Road WAKEFIELD, RI US 02879

Contact: MATT ST. ANGELO service@pjmarina.com;canastasio@wearcheckusa.com

T: (401)789-7189 F: (401)783-5350

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: VP153811
Unique No: 10700624
Signed: Don Baldridge
Report Date: 20 Oct 2023

OIL ANALYSIS REPORT



