



RAJ 8158 VOLVO PENTA RAJ (S/N NOT GIVEN) - STARBOARD DIESEL ENGINE

Sample No: VPA029849

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

| SAMPLE INFORMAT | LIUN | | | |
|------------------|----------|---------------|------|--|
| 24MLTT IM OUMY | HUN | | | |
| Sample Number | | VPA029849 | | |
| Sample Date | | 19 Jul 2023 | | |
| Machine Hours | | 1723 | | |
| Oil Hours | | 150 | | |
| Oil Changed | | Changed | | |
| Sample Status | | NORMAL | | |
| | | | | |
| OIL CONDITION | | | | |
| Visc @ 100°C | cSt | 14.1 | | |
| Base Number (BN) | mg KOH/g | 11.2 | | |
| Oxidation (PA) | % | 45 | | |
| | | | | |
| CONTAMINATION | | | | |
| Soot % | % | ■ 0.3 | | |
| Nitration (PA) | % | 53 | | |
| Sulfation (PA) | % | 48 | | |
| Glycol | % | NEG | | |
| Fuel | % | <1.0 | | |
| Silicon | ppm | ■ 3 | | |
| Sodium | ppm | ■3 | | |
| Potassium | ppm | 1 | | |
| WEAD METALS | | | | |
| WEAR METALS | | | | |
| Iron | ppm | 10 | | |
| Copper | ppm | 5 | | |
| Lead | ppm | ■ 0 | | |
| Tin | ppm | ■ <1 | | |
| Aluminum | ppm | ■ 3 | | |
| Chromium | ppm | ■<1 | | |
| Molybdenum | ppm | 7 | | |
| Nickel | ppm | ■<1 | | |
| Titanium | ppm | ■ 0 | | |
| Silver | ppm | ■ 0 | | |
| Manganese | ppm | -<1 | | |
| Vanadium | ppm | 0 | | |
| ADDITIVES | | | | |
| ADDITIDDA | | | | |
| Calcium | ppm | 3626 | | |
| Magnesium | ppm | 136 | | |
| Zinc | ppm | 1233 | | |
| Phosphorus | ppm | 1037 | | |
| Barium | ppm | ■ 0 | | |
| Boron | ppm | 18 | | |
| | | | | |

Johnson & Towers, Inc

2021 Briggs Road MT.LAUREL, NJ US 08054

Contact: BRENT BUZBY
BBUZBY@JOHNSONTOWERS.COM

T: F:

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 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:
 VP855105

 Unique No:
 10566549

 Signed:
 Sean Felton

 Report Date:
 25 Jul 2023

OIL ANALYSIS REPORT



