

OIL ANALYSIS REPORT

VOLVO PENTA

SEA CUPPS SEA CUPPS VOLVO PENTA 2013645869 - PORT DIESEL ENGINE

Sample No: VPA055105

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

SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | VPA055105 | --- | --- | --- |
| Sample Date | 12 Dec 2023 | --- | --- | --- |
| Machine Hours | 569 | --- | --- | --- |
| Oil Hours | 11 | --- | --- | --- |
| Oil Changed | Not Changd | --- | --- | --- |
| Sample Status | NORMAL | --- | --- | --- |

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OIL CONDITION

| | | | | | |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C | cSt | █ 14.3 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 9.3 | --- | --- | --- |
| Oxidation (PA) | % | 55 | --- | --- | --- |

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 suitable for further service.

CONTAMINATION

| | | | | | |
|----------------|-----|-------|-----|-----|-----|
| Water | % | NEG | --- | --- | --- |
| Soot % | % | █ 0.1 | --- | --- | --- |
| Nitration (PA) | % | 45 | --- | --- | --- |
| Sulfation (PA) | % | 52 | --- | --- | --- |
| Glycol | % | NEG | --- | --- | --- |
| Fuel | % | < 1.0 | --- | --- | --- |
| Silicon | ppm | █ 6 | --- | --- | --- |
| Sodium | ppm | █ 2 | --- | --- | --- |
| Potassium | ppm | █ 4 | --- | --- | --- |

WEAR METALS

| | | | | | |
|------------|-----|-------|-----|-----|-----|
| Iron | ppm | █ 4 | --- | --- | --- |
| Copper | ppm | █ < 1 | --- | --- | --- |
| Lead | ppm | █ < 1 | --- | --- | --- |
| Tin | ppm | █ < 1 | --- | --- | --- |
| Aluminum | ppm | █ 2 | --- | --- | --- |
| Chromium | ppm | █ < 1 | --- | --- | --- |
| Molybdenum | ppm | █ 14 | --- | --- | --- |
| Nickel | ppm | █ < 1 | --- | --- | --- |
| Titanium | ppm | █ 66 | --- | --- | --- |
| Silver | ppm | █ 0 | --- | --- | --- |
| Manganese | ppm | █ < 1 | --- | --- | --- |
| Vanadium | ppm | < 1 | --- | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | █ 1447 | --- | --- | --- |
| Magnesium | ppm | █ 479 | --- | --- | --- |
| Zinc | ppm | █ 1089 | --- | --- | --- |
| Phosphorus | ppm | █ 958 | --- | --- | --- |
| Barium | ppm | █ 12 | --- | --- | --- |
| Boron | ppm | 123 | --- | --- | --- |

Depot: VP288530

Unique No: 10790338

Signed: Don Baldrige

Report Date: 18 Dec 2023

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GRAPHS

