

OIL ANALYSIS REPORT



LEACH ONAN B100098209 - GENSET

Sample No: VPA036361
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-----|-----|
| Sample Number | VPA036361 | VPA031026 | --- | --- |
| Sample Date | 16 Nov 2023 | 16 Jan 2021 | --- | --- |
| Machine Hours | 1012 | 1012 | --- | --- |
| Oil Hours | 0 | 0 | --- | --- |
| Oil Changed | Changed | Changed | --- | --- |
| Sample Status | NORMAL | NORMAL | --- | --- |

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OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|-----|-----|
| Visc @ 100°C | cSt | 14.0 | 13.3 | --- | --- |
| Base Number (BN) | mg KOH/g | 8.6 | --- | --- | --- |
| Oxidation (PA) | % | 61 | 53 | --- | --- |

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 | NEG | --- | --- |
| Soot % | % | 0 | 0.1 | --- | --- |
| Nitration (PA) | % | 43 | 47 | --- | --- |
| Sulfation (PA) | % | 53 | 50 | --- | --- |
| Glycol | % | NEG | NEG | --- | --- |
| Fuel | % | <1.0 | <1.0 | --- | --- |
| Silicon | ppm | 4 | 8 | --- | --- |
| Sodium | ppm | 2 | 3 | --- | --- |
| Potassium | ppm | 7 | 10 | --- | --- |

WEAR METALS

| | | | | | |
|------------|-----|--------------|----|-----|-----|
| Iron | ppm | 2 | 4 | --- | --- |
| Copper | ppm | <1 | <1 | --- | --- |
| Lead | ppm | 1 | 2 | --- | --- |
| Tin | ppm | 0 | 0 | --- | --- |
| Aluminum | ppm | 1 | 2 | --- | --- |
| Chromium | ppm | 0 | <1 | --- | --- |
| Molybdenum | ppm | 11 | 58 | --- | --- |
| Nickel | ppm | 0 | <1 | --- | --- |
| Titanium | ppm | <1 | <1 | --- | --- |
| Silver | ppm | <1 | 0 | --- | --- |
| Manganese | ppm | 0 | 0 | --- | --- |
| Vanadium | ppm | <1 | 0 | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|-------------|------|-----|-----|
| Calcium | ppm | 1976 | 1163 | --- | --- |
| Magnesium | ppm | 193 | 1000 | --- | --- |
| Zinc | ppm | 1249 | 1135 | --- | --- |
| Phosphorus | ppm | 960 | 1084 | --- | --- |
| Barium | ppm | 0 | 0 | --- | --- |
| Boron | ppm | 155 | 2 | --- | --- |

Depot: VP1298996
Unique No: 10753555
Signed: Jonathan Hester
Report Date: 30 Nov 2023

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VOLVO PENTA

GRAPHS

