

OIL ANALYSIS REPORT

VOLVO PENTA

DAVID DEMARIA **DIW** VOLVO PENTA 2006006859 - PORT DIESEL ENGINE

Sample No: VPA059178

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-------------|-----|-----|
| Sample Number | VPA059178 | VPA048210 | --- | --- |
| Sample Date | 08 Feb 2024 | 08 Mar 2022 | --- | --- |
| Machine Hours | 1532 | 1444 | --- | --- |
| Oil Hours | 0 | 0 | --- | --- |
| Oil Changed | Changed | Changed | --- | --- |
| Sample Status | NORMAL | NORMAL | --- | --- |

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OIL CONDITION

| | | | | | |
|------------------|----------|--------|--------|-----|-----|
| Visc @ 100°C | cSt | █ 13.5 | █ 13.8 | --- | --- |
| Base Number (BN) | mg KOH/g | █ 9.7 | █ 10.6 | --- | --- |
| Oxidation (PA) | % | 62 | 70 | --- | --- |

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 % | % | █ 0.1 | █ 0.2 | --- | --- |
| Nitration (PA) | % | 56 | 68 | --- | --- |
| Sulfation (PA) | % | 53 | 60 | --- | --- |
| Glycol | % | NEG | NEG | --- | --- |
| Fuel | % | <1.0 | <1.0 | --- | --- |
| Silicon | ppm | █ 6 | █ 6 | --- | --- |
| Sodium | ppm | █ 0 | █ 1 | --- | --- |
| Potassium | ppm | █ 0 | █ 2 | --- | --- |

WEAR METALS

| | | | | | |
|------------|-----|------|------|-----|-----|
| Iron | ppm | █ 13 | █ 19 | --- | --- |
| Copper | ppm | █ 3 | █ 5 | --- | --- |
| Lead | ppm | █ 0 | █ 1 | --- | --- |
| Tin | ppm | █ <1 | █ <1 | --- | --- |
| Aluminum | ppm | █ 1 | █ 3 | --- | --- |
| Chromium | ppm | █ 0 | █ <1 | --- | --- |
| Molybdenum | ppm | █ 57 | █ 59 | --- | --- |
| Nickel | ppm | █ 0 | █ 0 | --- | --- |
| Titanium | ppm | █ 0 | █ 0 | --- | --- |
| Silver | ppm | █ 0 | █ 0 | --- | --- |
| Manganese | ppm | █ <1 | █ <1 | --- | --- |
| Vanadium | ppm | 0 | <1 | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|--------|--------|-----|-----|
| Calcium | ppm | █ 1075 | █ 1425 | --- | --- |
| Magnesium | ppm | █ 927 | █ 970 | --- | --- |
| Zinc | ppm | █ 1248 | 1496 | --- | --- |
| Phosphorus | ppm | █ 1047 | █ 1242 | --- | --- |
| Barium | ppm | █ 0 | █ 0 | --- | --- |
| Boron | ppm | █ 1 | █ 24 | --- | --- |

Depot: VP794951
Unique No: 10925642
Signed: Don Baldrige
Report Date: 14 Mar 2024

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GRAPHS

