

OIL ANALYSIS REPORT

**VOLVO
PENTA**

KNEELAND C4980 VOLVO PENTA KNEELAND (S/N NOT GIVEN) - GENSET

Sample No: VPA044028

Oil Type: DIESEL ENGINE OIL SAE 30

SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | VPA044028 | --- | --- | --- |
| Sample Date | 23 Jul 2023 | --- | --- | --- |
| Machine Hours | 0 | --- | --- | --- |
| Oil Hours | 0 | --- | --- | --- |
| Oil Changed | N/A | --- | --- | --- |
| Sample Status | NORMAL | --- | --- | --- |

Walstrom Marine

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US 49740

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OIL CONDITION

| | | | | | |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C | cSt | █ 12.5 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 9.7 | --- | --- | --- |
| Oxidation (PA) | % | 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 acceptable for the time in service.

CONTAMINATION

| | | | | | |
|----------------|-----|-------|-----|-----|-----|
| Soot % | % | █ 0.1 | --- | --- | --- |
| Nitration (PA) | % | 43 | --- | --- | --- |
| Sulfation (PA) | % | 48 | --- | --- | --- |
| Glycol | % | NEG | --- | --- | --- |
| Fuel | % | < 1.0 | --- | --- | --- |
| Silicon | ppm | █ 4 | --- | --- | --- |
| Sodium | ppm | █ 3 | --- | --- | --- |
| Potassium | ppm | █ < 1 | --- | --- | --- |

WEAR METALS

| | | | | | |
|------------|-----|-------|-----|-----|-----|
| Iron | ppm | █ 5 | --- | --- | --- |
| Copper | ppm | █ < 1 | --- | --- | --- |
| Lead | ppm | █ 0 | --- | --- | --- |
| Tin | ppm | █ < 1 | --- | --- | --- |
| Aluminum | ppm | █ < 1 | --- | --- | --- |
| Chromium | ppm | █ < 1 | --- | --- | --- |
| Molybdenum | ppm | █ 62 | --- | --- | --- |
| Nickel | ppm | █ 0 | --- | --- | --- |
| Titanium | ppm | █ < 1 | --- | --- | --- |
| Silver | ppm | █ 0 | --- | --- | --- |
| Manganese | ppm | █ < 1 | --- | --- | --- |
| Vanadium | ppm | 0 | --- | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | █ 1108 | --- | --- | --- |
| Magnesium | ppm | █ 1004 | --- | --- | --- |
| Zinc | ppm | █ 1323 | --- | --- | --- |
| Phosphorus | ppm | █ 1104 | --- | --- | --- |
| Barium | ppm | █ 0 | --- | --- | --- |
| Boron | ppm | █ 4 | --- | --- | --- |

Depot: VP154879

Unique No: 10566674

Signed: Sean Felton

Report Date: 25 Jul 2023

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GRAPHS

