OIL ANALYSIS REPORT

VOLVO PENTA

CHRIS MCBRIDE 6634 VOLVO PENTA D4-300I-F A250796 - DIESEL ENGINE

Sample No: VPA060826

Oil Type: {unknown}

SAMPLE INFORMATION

Vanadium

Calcium

Zinc

Barium

Boron

Magnesium

Phosphorus

ADDITIVES

ppm

ppm

ppm

ppm

ppm

ppm

ppm

| Sample Number VPA060826 Sample Date 17 Apr 2024 Machine Hours 552 Oil Hours 0 Oil Ghanged Not Changd Sample Status NORMAL OIL CONDITION Visc @ 100°C cSt 14.3 Nork Sage Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 Soot % % 0.1 Vater % NEG Sulfation (PA) % 56 Sulfation (PA) % S6 Sulfation (PA) % s6 | | | | | |
|---|------------------|----------|-------------|------|--|
| Sample Date 17 Apr 2024 Machine Hours 552 Oil Hours 0 Sample Status Nor Changd Sample Status NORMAL Oil CONDITION Visc @ 100°C cSt 14.3 Base Number (BN) mg KOH/g 9.6 Coxidation (PA) % 66 Vater % NEG Sout% % 0.1 Sout% % 51 Glycol % NEG Sulfation (PA) % 56 Sulfation ppm 7 | Sample Number | | VPA060826 | | |
| Machine Hours 552 Oil Hours 0 Oil Changed Not Changd Sample Status Not Changd OIL CONDITION Visc @ 100°C cSt 14.3 Base Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 Vater % NEG Soot % 0.0.1 Sulfation (PA) % 51 Sulfation (PA) % S6 Sulfation (PA) % S6 Sulfation (PA) % S6 Sulfation (PA) ppm 1 | | | 17 Apr 2024 | | |
| Oil Changed Sample Status Not Changd NORMAL Sample Status NORMAL OIL CONDITION Visc @ 100°C cSt 14.3 Base Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 CONTAMINATION Water % NEG Solo % % 51 Sulfation (PA) % 56 Sulfation (PA) % <1.0 | Machine Hours | | 552 | | |
| Sample Status NORMAL OIL CONDITION Visc @ 100°C cSt 14.3 Base Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 CONTAMINATION % 10.1 Soot % % 0.1 Soot % % 51 Sulfation (PA) % 56 Sulfation (PA) % 10 Sulfation (PA) % 10 Sulfation (PA) % 10 Sulfation (PA) ppm 14 Fuel % <1.0 | Oil Hours | | 0 | | |
| OIL CONDITION Visc @ 100°C cSt 14.3 Base Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 CONTAMINATION Water % NEG Soot % % 0.1 Slifation (PA) % 56 Sulfation (PA) % S16 Sulfation (PA) % S6 Sulfation (PA) % <1.0 | Oil Changed | | Not Changd | | |
| Visc @ 100°C cSt 14.3 Base Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 CONTAMINATION Water % NEG Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Sulfation (PA) % 56 Sulfation (PA) % 56 Sulfation (PA) % 77 Sodium ppm 2 Sodium ppm 9 Potassium ppm 9 Copper | Sample Status | | NORMAL | | |
| Visc @ 100°C cSt 14.3 Base Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 CONTAMINATION % 66 Water % NEG Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Sulfation (PA) % 56 Sulfation (PA) % 70 Sulfation (PA) % 70 Sulfation (PA) % 70 Sulfation (PA) % 70 Sulfation (PA) ppm 7 Yold ppm 7 <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | |
| Base Number (BN) mg KOH/g 9.6 Oxidation (PA) % 66 CONTAMINATION Water % NEG Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Sulfation (PA) % 56 Sulfation (PA) % 56 Sulfation (PA) % <1.0 | OIL CONDITION | | | | |
| Oxidation (PA) % 66 CONTAMINATION NEG Water % NEG Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Glycol % NEG Fuel % <1.0 Silicon ppm 7 Sodium ppm 2 Sodium ppm 2 VEAR METALS Iron ppm 9 Iron ppm 0 | Visc @ 100°C | cSt | 14.3 | | |
| CONTAMINATION Water % NEG Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Glycol % NEG Fuel % <1.0 | Base Number (BN) | mg KOH/g | 9.6 | | |
| Water % NEG Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Sulfation (PA) % 56 Glycol % NEG Fuel % <1.0 | Oxidation (PA) | % | 66 | | |
| Water % NEG Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Sulfation (PA) % 56 Glycol % NEG Fuel % <1.0 | CONTAMINATION | | | | |
| Soot % % 0.1 Nitration (PA) % \$1 Sulfation (PA) % \$6 Glycol % NEG Fuel % <1.0 | LUNIAMINATION | | | | |
| Soot % % 0.1 Nitration (PA) % 51 Sulfation (PA) % 56 Glycol % NEG Fuel % <1.0 | Water | % | NEG | | |
| Sulfation (PA) % 56 Glycol % NEG Fuel % <1.0 Silicon ppm 7 Sodium ppm 4 Potassium ppm 2 WEAR METALS Iron ppm 9 Copper ppm 0 Lead ppm <1 | | % | 0.1 | | |
| Glycol % NEG Fuel % <1.0 | Nitration (PA) | % | 51 | | |
| Fuel % <1.0 Silicon ppm 7 Sodium ppm 4 Potassium ppm 2 WEAR METALS Iron ppm 9 Copper ppm 1 Lead ppm 0 Aluminum ppm 7 Molybdenum ppm 43 Nickel ppm <1 | Sulfation (PA) | % | 56 | | |
| Silicon ppm 7 Sodium ppm 4 Potassium ppm 2 WEAR METALS Iron ppm 9 Copper ppm 1 Lead ppm 0 Aluminum ppm Molybdenum ppm Nickel ppm | Glycol | % | NEG | | |
| Sodium ppm 4 Potassium ppm 2 WEAR METALS WEAR METALS Iron ppm 9 Copper ppm 1 Lead ppm 0 Aluminum ppm 7 Chromium ppm 43 Nickel ppm <1 | Fuel | % | <1.0 | | |
| Potassium ppm 2 WEAR METALS Iron ppm 9 Copper ppm 1 Lead ppm 0 Niminum ppm <1 Aluminum ppm 7 Molybdenum ppm 43 Nickel ppm <1 | Silicon | ppm | 7 | | |
| WEAR METALS Iron ppm 9 Copper ppm 1 Lead ppm 0 Tin ppm <1 | Sodium | ppm | 4 | | |
| Iron ppm 9 Copper ppm 1 Lead ppm 0 Tin ppm Aluminum ppm Chromium ppm | Potassium | ppm | 2 | | |
| Iron ppm 9 Copper ppm 1 Lead ppm 0 Tin ppm Aluminum ppm Chromium ppm | | | | | |
| Copper ppm 1 Lead ppm 0 Tin ppm <1 | | | | | |
| Lead ppm 0 Tin ppm <1 | Iron | ppm | 9 | | |
| Tin ppm <1 Aluminum ppm 7 Chromium ppm <1 | Copper | ppm | 1 | | |
| Aluminum ppm 7 Chromium ppm <1 Molybdenum ppm 43 Nickel ppm <1 | | ppm | 0 | | |
| Chromium ppm <1 Molybdenum ppm 43 Nickel ppm <1 | Tin | ppm | ■ <1 | | |
| Molybdenum ppm 43 Nickel ppm -1 | Aluminum | ppm | 7 | | |
| Nickel ppm 🔲 <1 | | ppm | □ <1 | | |
| | | ppm | 4 3 | | |
| Titanium ppm | | ppm | _ | | |
| | Titanium | ppm | □ <1 | | |
| Silver ppm 0 | | ppm | | | |
| Manganese ppm <1 | Manganese | ppm | <1 | | |

Northwest Diesel Power

1325 ROEDER AVE SUITE 103 BELLINGHAM, WA US 98225 Contact: BRANDON ROBERTSON parts@nwdieselpower.com T: F:

Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.Metal levels are typical for a new component breaking in. 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.

 Depot:
 VP759009

 Unique No:
 10992075

 Signed:
 Sean Felton

 Report Date:
 24 Apr 2024

<1

1144

755

866 **708**

|| <1

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OIL ANALYSIS REPORT



GRAPHS

