OIL ANALYSIS REPORT

RICK NORLBY VOLVO PENTA TAMD61A 1101001992-12175 - DIESEL ENGINE

Sample No: VPA060108

Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40

SAMPLE INFORMATION Sample Number VPA060108 12 Sep 2023 Sample Date Machine Hours 5152 90 **Oil Hours** Oil Changed Changed ABNORMAL Sample Status **OIL CONDITION** Visc @ 100°C cSt 13.9 Base Number (BN) mg KOH/g 8.1 Oxidation (PA) % 71 CONTAMINATION Soot % % 0.2 % Nitration (PA) 82 Sulfation (PA) % 56 % Glycol NEG Fuel % <1.0 Silicon ppm 5 Sodium **696** ppm Potassium 37 ppm WEAR METALS

| Iron | ppm | 4 92 | | |
|------------|-----|-------------|------|--|
| Copper | ppm | 9 | | |
| Lead | ppm | 11 | | |
| Tin | ppm | □ <1 | | |
| Aluminum | ppm | <1 | | |
| Chromium | ppm | 1 | | |
| Molybdenum | ppm | 40 | | |
| Nickel | ppm | 0 | | |
| Titanium | ppm | 0 | | |
| Silver | ppm | 0 | | |
| Manganese | ppm | 1 | | |
| Vanadium | ppm | 0 | | |

ADDITIVES

| Calcium | ppm | 🔲 1593 | | |
|------------|-----|------------|------|--|
| Magnesium | ppm | 837 | | |
| Zinc | ppm | 1137 | | |
| Phosphorus | ppm | 894 | | |
| Barium | ppm | 0 | | |
| Boron | ppm | 165 | | |

Northwest Diesel Power

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

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

 Depot:
 VP759009

 Unique No:
 10649108

 Signed:
 Jonathan Hester

 Report Date:
 20 Sep 2023

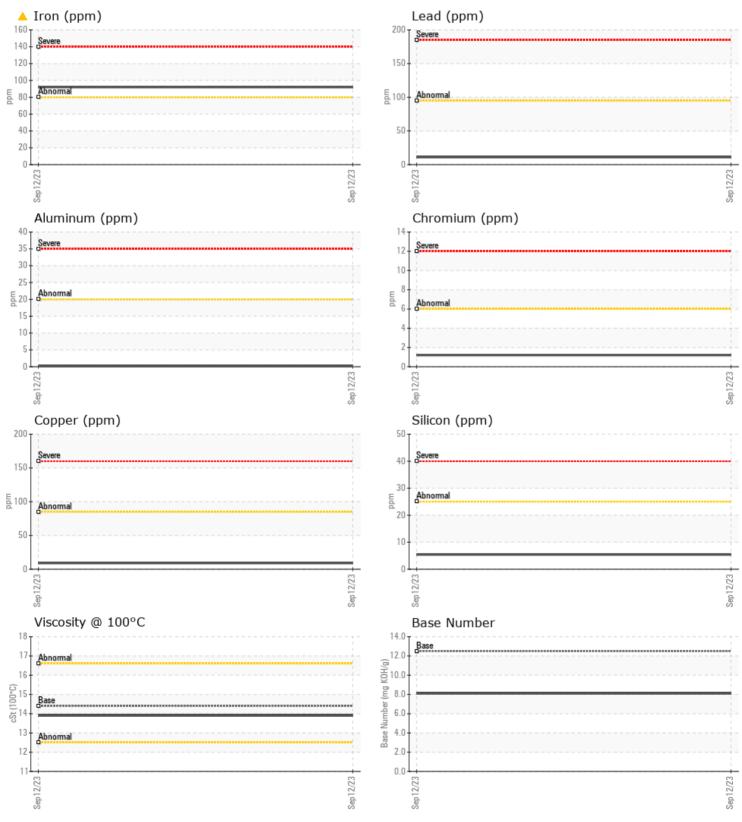
Contact/Location: BRANDON ROBERTSON - VP759009



OIL ANALYSIS REPORT



GRAPHS



Report Id: VP759009 [WUSCAR] 05953149 (Generated: 09/21/2023 06:22:14) Rev: 1

Contact/Location: BRANDON ROBERTSON - VP759009