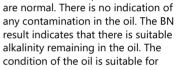
OIL ANALYSIS REPORT

JIM MERGARD 41769 VOLVO PENTA A310857 - CENTER DIESEL ENGINE

Sample No: VPA048031

Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40

SAMPLE INFORMATION Sample Number VPA048031 VPA043518 05 Oct 2022 Sample Date 21 Dec 2021 Machine Hours 230 224 0 **Oil Hours** 0 Oil Changed Not Changd Changed NORMAL Sample Status NORMAL **OIL CONDITION** Visc @ 100°C cSt 14.1 13.9 Base Number (BN) mg KOH/g 9.9 9 Oxidation (PA) % 61 51 CONTAMINATION Soot % % 0.1 0.2 % Nitration (PA) 49 61 Sulfation (PA) % 62 49 % Glycol NEG NEG Fuel % <1.0 <1.0 Silicon ppm 7 8 Sodium 2 1 ppm Potassium ppm 2 <1 WEAR METALS 14 Iron ppm 21 2 5 Copper ppm Lead ppm <1 2 Tin ■ <1 <1 ppm Aluminum 2 4 ppm 1 Chromium **|** <1 ppm Molybdenum 8 ppm 82 Nickel 2 3 ppm Titanium ■ <1 < 1 ppm Silver ppm 0 0 Manganese ■ <1 < 1 ppm Vanadium 0 <1 ppm **ADDITIVES** Calcium 1349 1211 ppm Magnesium 662 647 ppm 785 Zinc ppm 845 Phosphorus ppm 704 658 Barium ppm 0 🔲 < 1 78 Boron ppm 269



North Harbor Diesel Inc 720 30Th Street

720 30Th Street ANACORTES, WA US 98221 Contact: ROBBIN MURDOCK robbin@northharbordiesel.com T: (360)299-1904 F:

Resample at the next service interval

to monitor.All component wear rates

VOLVO PENTA

Diagnosis

further service.

 Depot:
 VP179089

 Unique No:
 10175773

 Signed:
 Don Baldridge

 Report Date:
 15 Oct 2022

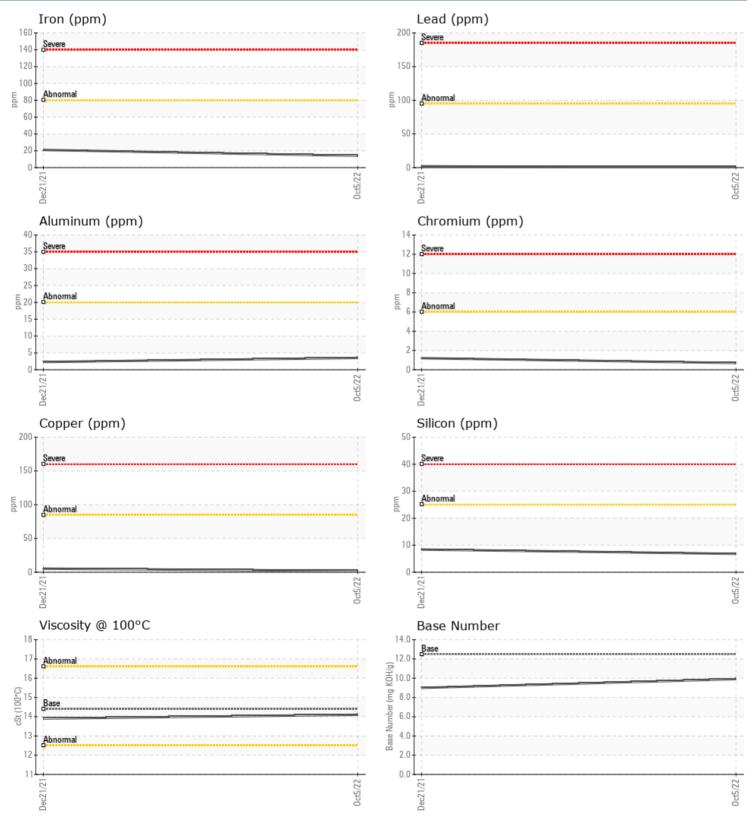
Report Id: VP179089 [WUSCAR] 05666203 (Generated: 08/14/2023 13:25:42) Rev: 1

Contact/Location: ROBBIN MURDOCK - VP179089

OIL ANALYSIS REPORT



GRAPHS



Report Id: VP179089 [WUSCAR] 05666203 (Generated: 08/14/2023 13:25:44) Rev: 1

Contact/Location: ROBBIN MURDOCK - VP179089