

OIL ANALYSIS REPORT

VOLVO PENTA

502804 VOLVO PENTA A359820 - STARBOARD DIESEL ENGINE

Sample No: VPA058196

Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40

SAMPLE INFORMATION

Sample Number	VPA058196	---	---	---
Sample Date	06 Mar 2024	---	---	---
Machine Hours	827	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

North Harbor Diesel Inc
720 30Th Street
ANACORTES, WA
US 98221
Contact: ED MCFARLIN
ed@northharbordiesel.com
T:
F:

OIL CONDITION

Visc @ 100°C	cSt	█ 13.6	---	---	---
Base Number (BN)	mg KOH/g	█ 9.1	---	---	---
Oxidation (PA)	%	55	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	48	---	---	---
Sulfation (PA)	%	50	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 3	---	---	---
Sodium	ppm	█ 0	---	---	---
Potassium	ppm	█ 0	---	---	---

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.

WEAR METALS

Iron	ppm	█ 11	---	---	---
Copper	ppm	█ 2	---	---	---
Lead	ppm	█ 0	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	█ <1	---	---	---
Chromium	ppm	█ 0	---	---	---
Molybdenum	ppm	█ 58	---	---	---
Nickel	ppm	█ 2	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 0	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 1053	---	---	---
Magnesium	ppm	█ 982	---	---	---
Zinc	ppm	█ 1234	---	---	---
Phosphorus	ppm	█ 1054	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 0	---	---	---

Depot: VP179089
Unique No: 10929307
Signed: Don Baldrige
Report Date: 20 Mar 2024

OIL ANALYSIS REPORT



GRAPHS

