

OIL ANALYSIS REPORT

VOLVO PENTA

MERLE KNAPP 502141 VOLVO PENTA 2006038891 - PORT DIESEL ENGINE

Sample No: VPA036840

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA036840	VPA016709	---	---
Sample Date	01 Aug 2023	18 Jun 2018	---	---
Machine Hours	1770	780	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

Endor Marine LLC - Coastal Marine - 152124
4300 11th Ave. NW
SEATTLE, WA
US 98107
Contact: WILLOW YANARELLA
service@coastalmarineengine.com
T: (206)784-3703
F: (206)784-8823

OIL CONDITION

Visc @ 100°C	cSt	14.4	13.87	---	---
Base Number (BN)	mg KOH/g	8.0	---	---	---
Oxidation (PA)	%	87	32	---	---

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 %	%	0.2	0	---	---
Nitration (PA)	%	102	33	---	---
Sulfation (PA)	%	64	39	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	4	6	---	---
Sodium	ppm	2	3	---	---
Potassium	ppm	3	1	---	---

WEAR METALS

Iron	ppm	16	11	---	---
Copper	ppm	17	4	---	---
Lead	ppm	<1	0	---	---
Tin	ppm	<1	0	---	---
Aluminum	ppm	13	1	---	---
Chromium	ppm	2	<1	---	---
Molybdenum	ppm	49	58	---	---
Nickel	ppm	4	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	1011	1077	---	---
Magnesium	ppm	876	851	---	---
Zinc	ppm	1202	1064	---	---
Phosphorus	ppm	931	921	---	---
Barium	ppm	0	0	---	---
Boron	ppm	24	44	---	---

Depot: VP794951
Unique No: 10588464
Signed: Don Baldrige
Report Date: 07 Aug 2023

OIL ANALYSIS REPORT



GRAPHS

