

[REMIEN] VOLVO PENTA A296114 - PORT DIESEL ENGINE

Sample No: VPA036758

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

SAMPLE INFORMATION

Sample Number	VPA036758	VPA041230	---	---
Sample Date	06 Dec 2023	22 Feb 2023	---	---
Machine Hours	676	621	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	NORMAL	NORMAL	---	---

Outstanding Marine
 PO Box 274
 GALENA, MD
 US 21635
 Contact: Ronda Bolinger
 rlwb@verizon.net
 T:
 F:

OIL CONDITION

Visc @ 100°C	cSt	14.0	13.4	---	---
Base Number (BN)	mg KOH/g	8.7	10.2	---	---
Oxidation (PA)	%	63	57	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	49	49	---	---
Sulfation (PA)	%	55	52	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	5	6	---	---
Sodium	ppm	9	<1	---	---
Potassium	ppm	5	2	---	---

WEAR METALS

Iron	ppm	11	9	---	---
Copper	ppm	4	2	---	---
Lead	ppm	0	1	---	---
Tin	ppm	0	<1	---	---
Aluminum	ppm	2	<1	---	---
Chromium	ppm	1	0	---	---
Molybdenum	ppm	6	58	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	3	<1	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	2064	1148	---	---
Magnesium	ppm	139	992	---	---
Zinc	ppm	1232	1325	---	---
Phosphorus	ppm	1042	1034	---	---
Barium	ppm	0	0	---	---
Boron	ppm	178	2	---	---

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.

Depot: VP153685
Unique No: 10781921
Signed: Sean Felton
Report Date: 14 Dec 2023

Contact/Location: Ronda Bolinger - VP153685

GRAPHS

