

OIL ANALYSIS REPORT



KIRK RUSSEL 502875 VOLVO PENTA 2006020606 - STARBOARD DIESEL ENGINE

Sample No: VPA059343
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA059343	VPA047107	VPA011726	---
Sample Date	21 Mar 2024	25 Apr 2022	26 Aug 2016	---
Machine Hours	1035	1021	20	---
Oil Hours	0	0	20	---
Oil Changed	Not Changd	Changed	N/A	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	13.7	14.3	14.99	---
Base Number (BN)	mg KOH/g	9.9	9.4	---	---
Oxidation (PA)	%	56	61	44	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.2	0	---
Nitration (PA)	%	44	79	42	---
Sulfation (PA)	%	51	55	44	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	6	4	4	---
Sodium	ppm	0	1	3	---
Potassium	ppm	0	4	1	---

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	16	16	5	---
Copper	ppm	1	3	<1	---
Lead	ppm	<1	1	0	---
Tin	ppm	0	<1	0	---
Aluminum	ppm	6	2	3	---
Chromium	ppm	0	<1	<1	---
Molybdenum	ppm	52	10	73	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	<1	0	---
Silver	ppm	0	<1	0	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	<1	0	---

ADDITIVES

Calcium	ppm	1156	1304	1260	---
Magnesium	ppm	954	719	415	---
Zinc	ppm	1242	886	1032	---
Phosphorus	ppm	1055	732	898	---
Barium	ppm	0	0	0	---
Boron	ppm	14	92	376	---

Depot: VP794951
Unique No: 10941496
Signed: Don Baldrige
Report Date: 27 Mar 2024

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GRAPHS

