

OIL ANALYSIS REPORT

VOLVO PENTA

CARTER PB50-39 VOLVO PENTA A900912 - STARBOARD DIESEL ENGINE

Sample No: VPA050632
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA050632	VPA048461	---	---
Sample Date	03 Sep 2023	22 Sep 2022	---	---
Machine Hours	705	525	---	---
Oil Hours	175	160	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

GRAND BANKS
 450 SW SALEM RD
 STUART, FL
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OIL CONDITION

Visc @ 100°C	cSt	13.5	13.3	---	---
Base Number (BN)	mg KOH/g	9.7	11.1	---	---
Oxidation (PA)	%	57	61	---	---

CONTAMINATION

Soot %	%	0.7	0.3	---	---
Nitration (PA)	%	58	52	---	---
Sulfation (PA)	%	55	58	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	5	4	---	---
Sodium	ppm	2	1	---	---
Potassium	ppm	1	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	25	8	---	---
Copper	ppm	8	4	---	---
Lead	ppm	2	<1	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	2	1	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	64	62	---	---
Nickel	ppm	2	<1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	<1	0	---	---

ADDITIVES

Calcium	ppm	1175	1109	---	---
Magnesium	ppm	1042	945	---	---
Zinc	ppm	1347	1259	---	---
Phosphorus	ppm	1052	1041	---	---
Barium	ppm	0	0	---	---
Boron	ppm	3	22	---	---

Depot: VP531377
Unique No: 10642224
Signed: Don Baldrige
Report Date: 12 Sep 2023

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GRAPHS

