

OIL ANALYSIS REPORT

VOLVO PENTA

BOB GUNTHER HIGH POINT/3491 VOLVO PENTA 70112022390 - STARBOARD DIESEL ENGINE

Sample No: VPA036632

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

SAMPLE INFORMATION

Sample Number	VPA036632	VPA050519	---	---
Sample Date	08 Nov 2023	21 Jun 2023	---	---
Machine Hours	302	121	---	---
Oil Hours	0	121	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	ATTENTION	---	---

GRAND BANKS

450 SW SALEM RD

STUART, FL

US 34994

Contact: ROBERT ANTONA

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T: (609)384-5290

F:

OIL CONDITION

Visc @ 100°C	cSt	▲ 12.0	▲ 11.2	---	---
Base Number (BN)	mg KOH/g	■ 8.9	■ 9.5	---	---
Oxidation (PA)	%	60	56	---	---

CONTAMINATION

Soot %	%	■ 0.8	■ 0.3	---	---
Nitration (PA)	%	65	48	---	---
Sulfation (PA)	%	58	53	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	▲ 2.4	---	---
Silicon	ppm	■ 13	■ 46	---	---
Sodium	ppm	■ 2	■ 4	---	---
Potassium	ppm	■ <1	■ 6	---	---

WEAR METALS

Iron	ppm	■ 20	■ 20	---	---
Copper	ppm	■ 76	■ 23	---	---
Lead	ppm	■ 2	■ 3	---	---
Tin	ppm	■ 1	■ 3	---	---
Aluminum	ppm	■ 1	■ 0	---	---
Chromium	ppm	■ <1	■ 1	---	---
Molybdenum	ppm	■ 54	■ 55	---	---
Nickel	ppm	■ 1	■ <1	---	---
Titanium	ppm	■ 0	■ <1	---	---
Silver	ppm	■ <1	■ <1	---	---
Manganese	ppm	■ <1	■ 2	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	■ 1126	■ 2250	---	---
Magnesium	ppm	■ 851	■ 298	---	---
Zinc	ppm	■ 1182	■ 1242	---	---
Phosphorus	ppm	■ 989	■ 1021	---	---
Barium	ppm	■ 0	■ 1	---	---
Boron	ppm	■ 9	215	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type.

Depot: VP531377

Unique No: 10743028

Signed: Don Baldrige

Report Date: 19 Nov 2023

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GRAPHS

