

OIL ANALYSIS REPORT

VOLVO PENTA

JAMES E CARLSON VOLVO PENTA A1054031 - STARBOARD DIESEL ENGINE

Sample No: VPA050795
Oil Type: SHELL ROTELLA T4 15W40

SAMPLE INFORMATION

Sample Number	VPA050795	VPA044720	---	---
Sample Date	10 Oct 2023	25 Oct 2022	---	---
Machine Hours	239	207	---	---
Oil Hours	32	75	---	---
Oil Changed	N/A	Changed	---	---
Sample Status	NORMAL	ATTENTION	---	---

Point Judith Marina
360 Gooseberry Road
WAKEFIELD, RI
US 02879
Contact: MATT ST. ANGELO
service@pjmarina.com;canastasio@wearcheckusa.com
T: (401)789-7189
F: (401)783-5350

OIL CONDITION

Visc @ 100°C	cSt	█ 14.6	█ 14.4	---	---
Base Number (BN)	mg KOH/g	█ 7.7	█ 8.1	---	---
Oxidation (PA)	%	65	68	---	---

CONTAMINATION

Soot %	%	█ 0.4	█ 0.6	---	---
Nitration (PA)	%	59	73	---	---
Sulfation (PA)	%	56	57	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 11	█ 19	---	---
Sodium	ppm	█ 4	█ 8	---	---
Potassium	ppm	█ 12	█ 13	---	---

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	█ 67	▲ 93	---	---
Copper	ppm	█ 12	█ 20	---	---
Lead	ppm	█ 2	█ 4	---	---
Tin	ppm	█ 1	█ 2	---	---
Aluminum	ppm	█ 10	█ 19	---	---
Chromium	ppm	█ 4	█ 6	---	---
Molybdenum	ppm	█ 5	█ 15	---	---
Nickel	ppm	█ 1	█ 2	---	---
Titanium	ppm	█ <1	█ <1	---	---
Silver	ppm	█ 0	█ 0	---	---
Manganese	ppm	█ <1	█ <1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	█ 2145	█ 2070	---	---
Magnesium	ppm	55	█ 164	---	---
Zinc	ppm	█ 1195	█ 1184	---	---
Phosphorus	ppm	█ 1022	█ 1026	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 176	█ 142	---	---

Depot: VP153811
Unique No: 10700627
Signed: Don Baldrige
Report Date: 20 Oct 2023

OIL ANALYSIS REPORT



GRAPHS

