

OIL ANALYSIS REPORT

**VOLVO
PENTA**

MICHAEL SCHIAVO - SUNSEEKER CUMMINS ONAN K160113900 - GENSET

Sample No: VPA036702

Oil Type: SHELL ROTELLA T 15W40

SAMPLE INFORMATION

Sample Number	VPA036702	VPA043528	VPA039599	VPA029244
Sample Date	07 Dec 2023	11 Dec 2022	30 Oct 2021	08 Apr 2020
Machine Hours	1075	930	773	503
Oil Hours	1075	930	773	503
Oil Changed	Changed	Changed	Changed	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Larry's Lighthouse Marina

1250

AQUEBOGUE, NY

US 11931

Contact: MAX FUHLBRUGGE

info@lighthousemarina.com

T: x:

F: x:

OIL CONDITION

Visc @ 100°C	cSt	13.7	13.9	14.0	13.0
Base Number (BN)	mg KOH/g	8.3	7.6	---	---
Oxidation (PA)	%	66	94	65	59

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	49	102	50	43
Sulfation (PA)	%	56	68	56	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	7	5	9
Sodium	ppm	2	<1	2	4
Potassium	ppm	6	8	6	10

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	2	5	3	4
Copper	ppm	<1	1	<1	<1
Lead	ppm	0	0	<1	0
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	<1	2	<1	1
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	0	5	15	55
Nickel	ppm	0	0	<1	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	<1	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0

ADDITIVES

Calcium	ppm	2101	2205	2056	1272
Magnesium	ppm	20	55	144	1007
Zinc	ppm	1180	1144	1124	1147
Phosphorus	ppm	916	940	979	1013
Barium	ppm	0	0	0	0
Boron	ppm	189	178	172	10

Depot: VP610438

Unique No: 10792814

Signed: Don Baldrige

Report Date: 20 Dec 2023

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GRAPHS

