

OIL ANALYSIS REPORT

**VOLVO
PENTA**

CATERPILLAR CATERPILLAR 3208 - PORT DIESEL ENGINE

Sample No: VPA034290

Oil Type: NOT GIVEN

SAMPLE INFORMATION

Sample Number	VPA034290	VPA028337	---	---
Sample Date	16 Aug 2023	21 Nov 2020	---	---
Machine Hours	0	0	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	SEVERE	---	---

Seaborn Marina Inc.

87 Ocean Ave.
BAY SHORE, NY
US 11706
Contact: MIKE MCSWEENEY
michael@sbaymarine.com

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F:

OIL CONDITION

Visc @ 100°C	cSt	13.3	---	---	---
Base Number (BN)	mg KOH/g	7.4	---	---	---
Oxidation (PA)	%	74	118	---	---

CONTAMINATION

Water	%	---	2.6	---	---
Soot %	%	0.5	0.4	---	---
Nitration (PA)	%	68	256	---	---
Sulfation (PA)	%	60	0	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	5	4	---	---
Sodium	ppm	4	934	---	---
Potassium	ppm	9	7	---	---

Diagnosis

No corrective action is recommended at this time. 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 condition of the oil is acceptable for the time in service.

WEAR METALS

Iron	ppm	42	34	---	---
Copper	ppm	51	44	---	---
Lead	ppm	3	13	---	---
Tin	ppm	1	0	---	---
Aluminum	ppm	4	3	---	---
Chromium	ppm	1	<1	---	---
Molybdenum	ppm	4	155	---	---
Nickel	ppm	2	1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	2	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	<1	0	---	---

ADDITIVES

Calcium	ppm	2120	1630	---	---
Magnesium	ppm	15	31	---	---
Zinc	ppm	1151	822	---	---
Phosphorus	ppm	895	693	---	---
Barium	ppm	0	0	---	---
Boron	ppm	186	53	---	---

Depot: VP543511
Unique No: 10615380
Signed: Doug Bogart
Report Date: 22 Aug 2023

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GRAPHS

