

OIL ANALYSIS REPORT



VANQUISH 58 VOLVO PENTA 7011474059 - PORT DIESEL ENGINE

Sample No: VPA049950
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA049950	VPA046460	VPA046178	VPA045293
Sample Date	02 May 2024	21 Dec 2022	03 Nov 2022	30 Aug 2022
Machine Hours	2023	1552	1493	1380
Oil Hours	0	0	100	0
Oil Changed	Changed	N/A	Not Changd	Not Changd
Sample Status	ABNORMAL	SEVERE	MARGINAL	ABNORMAL

Marine International Diesels Inc.
 3600 HACIENDA BLVD UNIT G
 DAVIE, FL
 US 33314
 Contact: ASHANTI BURKE
 aburke@midiflorida.com
 T: (954)761-1086
 F: (954)761-1186

OIL CONDITION

Visc @ 100°C	cSt	▲ 11.3	▲ 2.6	▲ 12.3	▲ 11.2
Base Number (BN)	mg KOH/g	■ 8.8	■ 6.4	■ 10.7	■ 9.5
Oxidation (PA)	%	60	31	60	62

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.3	■ 0.1	■ 0.3	■ 0.5
Nitration (PA)	%	67	51	53	71
Sulfation (PA)	%	56	40	57	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	▲ 4.8	▲ 70	▲ 2.1	▲ 5.4
Silicon	ppm	■ 5	■ 3	■ 4	■ 9
Sodium	ppm	■ <1	■ 0	■ 0	■ 1
Potassium	ppm	■ 2	■ <1	■ 2	■ 0

WEAR METALS

Iron	ppm	■ 9	■ 2	■ 4	■ 8
Copper	ppm	■ 42	■ 6	■ 13	■ 41
Lead	ppm	■ <1	■ 0	■ <1	■ <1
Tin	ppm	■ <1	■ 0	■ <1	■ <1
Aluminum	ppm	■ 2	■ 0	■ <1	■ 0
Chromium	ppm	■ <1	■ 0	■ <1	■ 1
Molybdenum	ppm	■ 58	● 22	■ 58	■ 52
Nickel	ppm	■ <1	■ 0	■ 0	■ <1
Titanium	ppm	■ 0	■ 0	■ 0	■ 0
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ 0	■ 0	■ <1	■ <1
Vanadium	ppm	0	0	0	<1

ADDITIVES

Calcium	ppm	■ 1056	● 406	■ 1075	■ 1024
Magnesium	ppm	■ 906	● 344	■ 881	■ 909
Zinc	ppm	■ 1244	● 466	■ 1195	■ 1240
Phosphorus	ppm	■ 920	● 387	■ 1015	■ 975
Barium	ppm	■ 0	■ 0	■ 2	■ 0
Boron	ppm	■ 10	■ 0	■ 1	■ 0

Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Depot: VP694356
Unique No: 11099182
Signed: Jonathan Hester
Report Date: 01 Jul 2024

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**VOLVO
PENTA**

GRAPHS

