

OIL ANALYSIS REPORT



BILL SHIELDS SAM VOLVO PENTA A1111409 - PORT DIESEL ENGINE

Sample No: VPA053216
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA053216	VPA035126	---	---
Sample Date	02 Apr 2024	04 Oct 2021	---	---
Machine Hours	345	239	---	---
Oil Hours	106	0	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

Endor Marine LLC - Coastal Marine - 152124
 4300 11th Ave. NW
 SEATTLE, WA
 US 98107
 Contact: WILLOW YANARELLA
 service@coastalmarineengine.com
 T: (206)784-3703
 F: (206)784-8823

OIL CONDITION

Visc @ 100°C	cSt	13.7	13.52	---	---
Base Number (BN)	mg KOH/g	10.4	---	---	---
Oxidation (PA)	%	55	65	---	---

CONTAMINATION

Water	%	NEG	0.102	---	---
Soot %	%	0.1	0.3	---	---
Nitration (PA)	%	39	48	---	---
Sulfation (PA)	%	51	64	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	4	8	---	---
Sodium	ppm	<1	2	---	---
Potassium	ppm	0	<1	---	---

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	3	12	---	---
Copper	ppm	2	7	---	---
Lead	ppm	0	4	---	---
Tin	ppm	0	1	---	---
Aluminum	ppm	<1	4	---	---
Chromium	ppm	0	<1	---	---
Molybdenum	ppm	64	123	---	---
Nickel	ppm	<1	2	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	0	<1	---	---
Vanadium	ppm	<1	<1	---	---

ADDITIVES

Calcium	ppm	1160	1539	---	---
Magnesium	ppm	1042	636	---	---
Zinc	ppm	1375	846	---	---
Phosphorus	ppm	1131	630	---	---
Barium	ppm	0	0	---	---
Boron	ppm	4	387	---	---

Depot: VP794951
Unique No: 10956668
Signed: Don Baldrige
Report Date: 05 Apr 2024

OIL ANALYSIS REPORT



GRAPHS

