

OIL ANALYSIS REPORT



SAM MVIR VOLVO PENTA 70085 14930 - PORT DIESEL ENGINE

Sample No: VPA060736
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA060736	VPA056046	---	---
Sample Date	25 Mar 2024	27 Apr 2023	---	---
Machine Hours	274	158	---	---
Oil Hours	274	158	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

Helmuts Marine Service
 619 Canal Street
 SAN RAFAEL, CA
 US 94901-3545
 Contact: NADINE URUIOLI
 SERVICE@HELMUTSMARINE.COM
 T: x
 F: x

OIL CONDITION

Visc @ 100°C	cSt	13.3	13.2	---	---
Base Number (BN)	mg KOH/g	10.1	8.3	---	---
Oxidation (PA)	%	61	63	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.4	0.3	---	---
Nitration (PA)	%	54	53	---	---
Sulfation (PA)	%	55	58	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	15	29	---	---
Sodium	ppm	3	2	---	---
Potassium	ppm	2	1	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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 suitable for further service.

WEAR METALS

Iron	ppm	29	29	---	---
Copper	ppm	99	61	---	---
Lead	ppm	0	0	---	---
Tin	ppm	<1	0	---	---
Aluminum	ppm	6	8	---	---
Chromium	ppm	2	2	---	---
Molybdenum	ppm	67	108	---	---
Nickel	ppm	2	2	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	<1	1	---	---
Manganese	ppm	<1	1	---	---
Vanadium	ppm	<1	<1	---	---

ADDITIVES

Calcium	ppm	1154	1464	---	---
Magnesium	ppm	875	801	---	---
Zinc	ppm	1078	977	---	---
Phosphorus	ppm	879	816	---	---
Barium	ppm	0	0	---	---
Boron	ppm	35	271	---	---

Depot: VP152741
Unique No: 10963031
Signed: Don Baldrige
Report Date: 06 Apr 2024

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

