

# OIL ANALYSIS REPORT



## SUSAN EIDE DILLON VOLVO PENTA 2006014370 - STARBOARD DIESEL ENGINE

**Sample No:** VPA059100  
**Oil Type:** VOLVO PENTA SAE 15W40

### SAMPLE INFORMATION

Sample Number	<b>VPA059100</b>	VPA045535	VPA047487	---
Sample Date	<b>20 Feb 2024</b>	13 Mar 2023	14 Mar 2022	---
Machine Hours	<b>882</b>	912	844	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	N/A	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.2</b>	13.3	14.0	---
Base Number (BN)	mg KOH/g	<b>9.6</b>	10.0	10.0	---
Oxidation (PA)	%	<b>71</b>	68	83	---

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>0.2</b>	0.2	0.1	---
Nitration (PA)	%	<b>69</b>	68	80	---
Sulfation (PA)	%	<b>58</b>	59	65	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>4</b>	4	3	---
Sodium	ppm	<b>0</b>	<1	1	---
Potassium	ppm	<b>2</b>	1	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	<b>7</b>	8	8	---
Copper	ppm	<b>4</b>	4	4	---
Lead	ppm	<b>2</b>	2	1	---
Tin	ppm	<b>&lt;1</b>	<1	<1	---
Aluminum	ppm	<b>2</b>	2	3	---
Chromium	ppm	<b>&lt;1</b>	<1	<1	---
Molybdenum	ppm	<b>59</b>	60	68	---
Nickel	ppm	<b>&lt;1</b>	<1	<1	---
Titanium	ppm	<b>&lt;1</b>	0	0	---
Silver	ppm	<b>&lt;1</b>	0	0	---
Manganese	ppm	<b>&lt;1</b>	<1	<1	---
Vanadium	ppm	<b>0</b>	0	<1	---

### ADDITIVES

Calcium	ppm	<b>978</b>	1111	1190	---
Magnesium	ppm	<b>941</b>	929	891	---
Zinc	ppm	<b>1153</b>	1249	1349	---
Phosphorus	ppm	<b>1004</b>	1058	1113	---
Barium	ppm	<b>&lt;1</b>	0	0	---
Boron	ppm	<b>2</b>	9	111	---

**Depot:** VP794951  
**Unique No:** 10889468  
**Signed:** Sean Felton  
**Report Date:** 23 Feb 2024

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# VOLVO PENTA

## GRAPHS

