

# OIL ANALYSIS REPORT



## JAMES REITZ EVAN/502955 VOLVO PENTA 2006036104 - CENTER DIESEL ENGINE

**Sample No:** VPA061595  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

### SAMPLE INFORMATION

Sample Number	<b>VPA061595</b>	VPA056396	VPA034840	---
Sample Date	<b>21 Jun 2024</b>	07 Jun 2023	09 Sep 2020	---
Machine Hours	<b>891</b>	817	784	---
Oil Hours	<b>891</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	Not Changd	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.4</b>	13.69	14.9	---
Base Number (BN)	mg KOH/g	<b>9.8</b>	9.5	---	---
Oxidation (PA)	%	<b>86</b>	69	77	---

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>0.1</b>	0.1	0.2	---
Nitration (PA)	%	<b>72</b>	60	83	---
Sulfation (PA)	%	<b>63</b>	57	61	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>9</b>	5	7	---
Sodium	ppm	<b>5</b>	2	4	---
Potassium	ppm	<b>1</b>	0	0	---

### 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>14</b>	14	28	---
Copper	ppm	<b>5</b>	3	6	---
Lead	ppm	<b>2</b>	<1	3	---
Tin	ppm	<b>1</b>	<1	0	---
Aluminum	ppm	<b>5</b>	2	14	---
Chromium	ppm	<b>1</b>	<1	2	---
Molybdenum	ppm	<b>56</b>	60	68	---
Nickel	ppm	<b>2</b>	<1	2	---
Titanium	ppm	<b>&lt;1</b>	0	<1	---
Silver	ppm	<b>&lt;1</b>	0	0	---
Manganese	ppm	<b>1</b>	<1	<1	---
Vanadium	ppm	<b>&lt;1</b>	0	0	---

### ADDITIVES

Calcium	ppm	<b>1607</b>	1093	1503	---
Magnesium	ppm	<b>843</b>	984	601	---
Zinc	ppm	<b>1208</b>	1362	1216	---
Phosphorus	ppm	<b>1001</b>	1103	1088	---
Barium	ppm	<b>1</b>	0	0	---
Boron	ppm	<b>37</b>	9	273	---

**Depot:** VP794951  
**Unique No:** 11101274  
**Signed:** Don Baldrige  
**Report Date:** 30 Jun 2024

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**VOLVO  
PENTA**

## GRAPHS

