



# CONSTRUCTION EQUIPMENT

## 24285 VOLVO EC350 314425 - DIESEL ENGINE



**Sample No:** VCP434621  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 24285



### SAMPLE INFORMATION

Sample Number	<b>VCP434621</b>	VCP420832	VCP401771	---
Sample Date	<b>28 Oct 2023</b>	12 Jun 2023	21 Feb 2023	---
Machine Hours	<b>1557</b>	997	516	---
Oil Hours	<b>0</b>	1000	500	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>ATTENTION</b>	ABNORMAL	ABNORMAL	---

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### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 12.1</b>	▲ 12.1	▲ 10.0	---
Base Number (BN)	mg KOH/g	<b>■ 8.9</b>	■ 8.1	■ 5.4	---
Oxidation (PA)	%	<b>86</b>	85	63	---

### Diagnosis

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 no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



### CONTAMINATION

Soot %	%	<b>■ 0.1</b>	■ 0.1	■ 0.1	---
Nitration (PA)	%	<b>69</b>	68	83	---
Sulfation (PA)	%	<b>63</b>	63	56	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	■ 1.0	---
Silicon	ppm	<b>■ 8</b>	■ 8	■ 26	---
Sodium	ppm	<b>■ 6</b>	■ 2	■ <1	---
Potassium	ppm	<b>■ 0</b>	■ 0	■ 5	---



### WEAR METALS

Iron	ppm	<b>■ 6</b>	■ 6	■ 13	---
Copper	ppm	<b>■ 20</b>	▲ 84	▲ 423	---
Lead	ppm	<b>■ &lt;1</b>	■ 0	■ 1	---
Tin	ppm	<b>■ &lt;1</b>	■ 2	■ 4	---
Aluminum	ppm	<b>■ &lt;1</b>	■ 2	■ 4	---
Chromium	ppm	<b>■ &lt;1</b>	■ <1	■ 0	---
Molybdenum	ppm	<b>■ 43</b>	■ 51	■ 93	---
Nickel	ppm	<b>■ 0</b>	■ 0	■ <1	---
Titanium	ppm	<b>&lt;1</b>	0	0	---
Silver	ppm	<b>■ 0</b>	■ 0	■ 0	---
Manganese	ppm	<b>■ &lt;1</b>	■ <1	■ 3	---
Vanadium	ppm	<b>&lt;1</b>	0	0	---



### ADDITIVES

Calcium	ppm	<b>■ 1701</b>	■ 1883	■ 2246	---
Magnesium	ppm	<b>■ 544</b>	■ 494	■ 27	---
Zinc	ppm	<b>■ 1187</b>	■ 1229	■ 1184	---
Phosphorus	ppm	<b>■ 902</b>	■ 999	■ 986	---
Barium	ppm	<b>■ 0</b>	■ 0	■ <1	---
Boron	ppm	<b>■ 20</b>	■ 63	■ 55	---

**Depot:** VOLVO3387  
**Unique No:** 10726074  
**Signed:** Don Baldrige  
**Report Date:** 06 Nov 2023



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## GRAPHS

