



# CONSTRUCTION EQUIPMENT

## SW-33839-2 CASTLE VA VOLVO EC350EL 3 10786 - DIESEL ENGINE



**Sample No:** VCP395777  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW-33839-2 CASTLE VA



### SAMPLE INFORMATION

Sample Number	<b>VCP395777</b>	VCP440342	VCP442151	VCP432504
Sample Date	<b>03 May 2024</b>	19 Feb 2024	29 Nov 2023	20 Sep 2023
Machine Hours	<b>9509</b>	8943	8434	7914
Oil Hours	<b>560</b>	508	520	520
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.0</b>	12.1	12.2	12.3
Base Number (BN)	mg KOH/g	<b>5.8</b>	7.2	8.0	8.4
Oxidation (PA)	%	<b>49</b>	54	60	65

### 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 suitable for further service.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.2</b>	0.2	0.1	0.1
Nitration (PA)	%	<b>67</b>	68	68	63
Sulfation (PA)	%	<b>53</b>	50	52	55
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	5	3	3
Sodium	ppm	<b>0</b>	3	<1	1
Potassium	ppm	<b>3</b>	2	<1	1



### WEAR METALS

Iron	ppm	<b>4</b>	5	3	3
Copper	ppm	<b>2</b>	2	<1	<1
Lead	ppm	<b>&lt;1</b>	<1	0	<1
Tin	ppm	<b>&lt;1</b>	<1	0	0
Aluminum	ppm	<b>2</b>	2	1	<1
Chromium	ppm	<b>&lt;1</b>	<1	<1	0
Molybdenum	ppm	<b>33</b>	56	62	60
Nickel	ppm	<b>0</b>	<1	0	0
Titanium	ppm	<b>2</b>	1	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	0	0
Vanadium	ppm	<b>&lt;1</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1758</b>	1096	1037	1132
Magnesium	ppm	<b>348</b>	704	883	1034
Zinc	ppm	<b>1032</b>	1083	1142	1312
Phosphorus	ppm	<b>912</b>	870	932	1052
Barium	ppm	<b>2</b>	34	2	0
Boron	ppm	<b>20</b>	13	4	1

**Depot:** VOLVO8770  
**Unique No:** 11022913  
**Signed:** Wes Davis  
**Report Date:** 14 May 2024



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## GRAPHS

