



# CONSTRUCTION EQUIPMENT

## 27843 VOLVO L350H 1048 - DIESEL ENGINE



**Sample No:** VCP426998  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 27843



### SAMPLE INFORMATION

Sample Number	<b>VCP426998</b>	VCP401777	VCP398954	VCP383520
Sample Date	<b>12 Aug 2023</b>	29 Apr 2023	26 Jan 2023	28 Oct 2022
Machine Hours	<b>9846</b>	9091	8223	7950
Oil Hours	<b>0</b>	1000	1000	501
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 11.3</b>	■ 13.2	■ 13.4	■ 13.2
Base Number (BN)	mg KOH/g	<b>■ 8.7</b>	■ 8.4	■ 8.8	■ 6.9
Oxidation (PA)	%	<b>64</b>	80	80	101

### CONTAMINATION

Soot %	%	<b>■ 0.5</b>	■ 0.3	■ 0.4	■ 0.8
Nitration (PA)	%	<b>73</b>	66	74	93
Sulfation (PA)	%	<b>58</b>	57	61	71
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>▲ 4.5</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>■ 5</b>	■ 3	■ 4	■ 5
Sodium	ppm	<b>■ 2</b>	■ 2	■ 2	■ 2
Potassium	ppm	<b>■ 6</b>	■ 2	■ <1	■ 6

### WEAR METALS

Iron	ppm	<b>■ 8</b>	■ 5	■ 7	■ 15
Copper	ppm	<b>■ 7</b>	■ 8	■ 15	■ 11
Lead	ppm	<b>■ 2</b>	■ 0	■ 3	■ 13
Tin	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ 2
Aluminum	ppm	<b>■ 4</b>	■ 2	■ 2	■ 5
Chromium	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ <1
Molybdenum	ppm	<b>■ 26</b>	■ 38	■ 35	■ 42
Nickel	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ <1
Titanium	ppm	<b>2</b>	<1	3	<1
Silver	ppm	<b>■ &lt;1</b>	■ 0	■ 0	0
Manganese	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ <1
Vanadium	ppm	<b>&lt;1</b>	0	<1	0

### ADDITIVES

Calcium	ppm	<b>■ 2171</b>	■ 1731	■ 1603	■ 1689
Magnesium	ppm	<b>■ 366</b>	■ 514	■ 532	■ 482
Zinc	ppm	<b>■ 1138</b>	■ 1152	■ 1115	■ 1093
Phosphorus	ppm	<b>■ 935</b>	■ 948	■ 890	■ 846
Barium	ppm	<b>■ 0</b>	■ 0	■ 0	■ 0
Boron	ppm	<b>■ 26</b>	■ 35	■ 40	■ 16

### Diagnosis

We advise that you check the fuel injection system. 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. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

**Depot:** VOLVO3387  
**Unique No:** 10608026  
**Signed:** Jonathan Hester  
**Report Date:** 22 Aug 2023



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## VOLVO GRAPHS

