



# CONSTRUCTION EQUIPMENT

## 20911 VOLVO L90H 623326 - DIESEL ENGINE



**Sample No:** VCE254224  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 20911



### SAMPLE INFORMATION

Sample Number	<b>VCE254224</b>	VCP422292	VCP419805	VCP370295
Sample Date	<b>27 Oct 2023</b>	24 Jul 2023	16 May 2023	27 Feb 2023
Machine Hours	<b>13257</b>	13120	0	12063
Oil Hours	<b>0</b>	0	0	12063
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>12.7</b>	12.3	12.9	13.5
Base Number (BN)	mg KOH/g	<b>10.4</b>	10.3	10.3	10.4
Oxidation (PA)	%	<b>81</b>	75	83	76

### 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

Soot %	%	<b>0.2</b>	0.2	0.2	0.2
Nitration (PA)	%	<b>54</b>	54	56	67
Sulfation (PA)	%	<b>60</b>	58	61	58
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>11</b>	12	12	12
Sodium	ppm	<b>4</b>	2	3	1
Potassium	ppm	<b>2</b>	0	0	2



### WEAR METALS

Iron	ppm	<b>5</b>	4	6	7
Copper	ppm	<b>&lt;1</b>	<1	<1	<1
Lead	ppm	<b>0</b>	0	<1	0
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>3</b>	2	3	5
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>43</b>	43	45	54
Nickel	ppm	<b>&lt;1</b>	0	<1	0
Titanium	ppm	<b>&lt;1</b>	0	<1	<1
Silver	ppm	<b>0</b>	0	<1	<1
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	<1



### ADDITIVES

Calcium	ppm	<b>1603</b>	1675	1836	1821
Magnesium	ppm	<b>514</b>	546	523	404
Zinc	ppm	<b>1165</b>	1157	1173	1172
Phosphorus	ppm	<b>964</b>	959	979	981
Barium	ppm	<b>&lt;1</b>	0	0	0
Boron	ppm	<b>42</b>	48	46	46

**Depot:** VOLV00124  
**Unique No:** 10723715  
**Signed:** Wes Davis  
**Report Date:** 02 Nov 2023



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## GRAPHS

