



# CONSTRUCTION EQUIPMENT

## R23768 IAA ENGLISHTO VOLVO L90H 623898 - DIESEL ENGINE



**Sample No:** VCP441970  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** R23768 IAA ENGLISHTO



### SAMPLE INFORMATION

Sample Number	<b>VCP441970</b>	VCP390256	VCP390246	VCP383603
Sample Date	<b>01 Dec 2023</b>	22 Aug 2023	20 Mar 2023	18 Oct 2022
Machine Hours	<b>12191</b>	11670	11193	10459
Oil Hours	<b>0</b>	0	500	500
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>13.0</b>	13.1	13.5	12.6
Base Number (BN)	mg KOH/g	<b>10.2</b>	9.8	10.3	10.5
Oxidation (PA)	%	<b>82</b>	80	85	82

### 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>0.4</b>	0.5	0.9	0.8
Nitration (PA)	%	<b>58</b>	58	77	68
Sulfation (PA)	%	<b>61</b>	60	65	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	5	8	7
Sodium	ppm	<b>0</b>	2	2	2
Potassium	ppm	<b>&lt;1</b>	0	0	0



### WEAR METALS

Iron	ppm	<b>7</b>	8	16	9
Copper	ppm	<b>0</b>	<1	<1	<1
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>0</b>	<1	<1	0
Aluminum	ppm	<b>1</b>	4	4	3
Chromium	ppm	<b>&lt;1</b>	<1	<1	1
Molybdenum	ppm	<b>42</b>	42	47	56
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	1
Vanadium	ppm	<b>0</b>	0	0	<1



### ADDITIVES

Calcium	ppm	<b>1576</b>	1872	1864	1660
Magnesium	ppm	<b>466</b>	553	582	517
Zinc	ppm	<b>1055</b>	1258	1270	1115
Phosphorus	ppm	<b>896</b>	1028	1037	876
Barium	ppm	<b>3</b>	0	0	0
Boron	ppm	<b>36</b>	35	34	32

**Depot:** HOFPISNJ  
**Unique No:** 10778856  
**Signed:** Wes Davis  
**Report Date:** 09 Dec 2023



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## GRAPHS

