



# CONSTRUCTION EQUIPMENT

E15004 VOLVO L90H 626247 - DIESEL ENGINE



**Sample No:** VCP416738  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** E15004



## SAMPLE INFORMATION

Sample Number	<b>VCP416738</b>	VCP383896	VCP396331	VCP375557
Sample Date	<b>25 Aug 2023</b>	21 Jun 2023	23 Mar 2023	16 Dec 2022
Machine Hours	<b>4792</b>	4143	3266	2283
Oil Hours	<b>600</b>	500	980	600
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**COLUMBIA FOREST**  
 395 MISSILE ST  
 PRESQUE ISLE, ME  
 US 04769  
 Contact: GARY

## OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	13.77	13.4	13.4
Base Number (BN)	mg KOH/g	<b>10.5</b>	9.8	10.1	11.9
Oxidation (PA)	%	<b>83</b>	90	84	88

T: (207)764-9428  
 F:

## 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>0.7</b>	0.8	0.7	0.6
Nitration (PA)	%	<b>66</b>	73	73	72
Sulfation (PA)	%	<b>64</b>	64	63	67
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	6	7	6
Sodium	ppm	<b>&lt;1</b>	2	3	0
Potassium	ppm	<b>&lt;1</b>	<1	0	1

## WEAR METALS

Iron	ppm	<b>12</b>	19	19	18
Copper	ppm	<b>&lt;1</b>	<1	1	1
Lead	ppm	<b>0</b>	0	0	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	1
Aluminum	ppm	<b>2</b>	3	4	4
Chromium	ppm	<b>&lt;1</b>	<1	1	<1
Molybdenum	ppm	<b>41</b>	41	46	45
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0

## ADDITIVES

Calcium	ppm	<b>1622</b>	1744	1848	1881
Magnesium	ppm	<b>476</b>	530	570	495
Zinc	ppm	<b>1098</b>	1179	1244	1210
Phosphorus	ppm	<b>913</b>	949	1017	993
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>23</b>	25	42	36

**Depot:** COLPRE  
**Unique No:** 10630058  
**Signed:** Wes Davis  
**Report Date:** 31 Aug 2023



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## GRAPHS

