



# CONSTRUCTION EQUIPMENT

## VOLVO L90H 625060 - DIESEL ENGINE



**Sample No:** VCP411987  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP411987</b>	VCP326047	VCP301521	VCP278464
Sample Date	<b>25 Aug 2023</b>	10 Sep 2021	11 Feb 2021	24 Jul 2020
Machine Hours	<b>2836</b>	0	914	484
Oil Hours	<b>0</b>	1500	500	484
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

### RIPA AND ASSOCIATES

10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: PM Services  
 PMServices@ripaconstruction.com  
 T:  
 F:



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.4</b>	13.3	13.0	12.8
Base Number (BN)	mg KOH/g	<b>9.5</b>	---	---	---
Oxidation (PA)	%	<b>83</b>	84	82	77

### 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	%	---	---	0.103	---
Soot %	%	<b>0.5</b>	0.8	0.5	0.5
Nitration (PA)	%	<b>77</b>	87	76	70
Sulfation (PA)	%	<b>61</b>	63	63	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>7</b>	9	9	18
Sodium	ppm	<b>3</b>	3	0	4
Potassium	ppm	<b>2</b>	3	4	3



### WEAR METALS

Iron	ppm	<b>20</b>	28	29	44
Copper	ppm	<b>2</b>	2	3	8
Lead	ppm	<b>&lt;1</b>	<1	<1	1
Tin	ppm	<b>&lt;1</b>	2	2	3
Aluminum	ppm	<b>6</b>	19	14	42
Chromium	ppm	<b>3</b>	2	3	6
Molybdenum	ppm	<b>52</b>	47	47	37
Nickel	ppm	<b>&lt;1</b>	0	0	<1
Titanium	ppm	<b>&lt;1</b>	<1	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>1</b>	1	2	5
Vanadium	ppm	<b>&lt;1</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1961</b>	1660	1772	1528
Magnesium	ppm	<b>600</b>	596	576	648
Zinc	ppm	<b>1289</b>	1194	1129	866
Phosphorus	ppm	<b>1030</b>	981	1047	824
Barium	ppm	<b>0</b>	0	<1	<1
Boron	ppm	<b>26</b>	17	22	25

**Depot:** RIPTAM  
**Unique No:** 10649663  
**Signed:** Wes Davis  
**Report Date:** 20 Sep 2023



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## GRAPHS

