



# CONSTRUCTION EQUIPMENT

RIPA VOLVO L110H 631226 - DIESEL ENGINE



**Sample No:** VCP422697  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** RIPA



## SAMPLE INFORMATION

Sample Number	<b>VCP422697</b>	VCP420274	VCP392909	VCP330260
Sample Date	<b>14 Jul 2023</b>	11 Apr 2023	08 Dec 2022	25 Feb 2022
Machine Hours	<b>12022</b>	11460	10775	9022
Oil Hours	<b>0</b>	500	500	1500
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  
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T:  
F:



## OIL CONDITION

Visc @ 100°C	cSt	<b>12.5</b>	13.2	13.5	13.1
Base Number (BN)	mg KOH/g	<b>10.3</b>	9.1	9.6	11.6
Oxidation (PA)	%	<b>82</b>	78	88	88

### 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>0.3</b>	0.3	0.4	0.3
Nitration (PA)	%	<b>68</b>	66	88	73
Sulfation (PA)	%	<b>60</b>	55	61	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	4	6	4
Sodium	ppm	<b>2</b>	2	4	2
Potassium	ppm	<b>&lt;1</b>	0	0	0



## WEAR METALS

Iron	ppm	<b>10</b>	13	19	11
Copper	ppm	<b>&lt;1</b>	1	2	1
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	0	1	<1
Aluminum	ppm	<b>4</b>	4	6	5
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>44</b>	48	45	42
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>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>1739</b>	1687	1846	1701
Magnesium	ppm	<b>560</b>	592	538	508
Zinc	ppm	<b>1247</b>	1186	1166	1035
Phosphorus	ppm	<b>1018</b>	980	973	916
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>28</b>	25	16	30

**Depot:** RIPTAM  
**Unique No:** 10605785  
**Signed:** Wes Davis  
**Report Date:** 17 Aug 2023



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## GRAPHS

