



# CONSTRUCTION EQUIPMENT

## VOLVO L110H 63272 - DIESEL ENGINE



**Sample No:** VCP432256  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP432256</b>	VCP417663	VCP414668	VCP394460
Sample Date	<b>15 Jan 2024</b>	19 Sep 2023	11 Sep 2023	07 Mar 2023
Machine Hours	<b>3549</b>	3022	2619	1775
Oil Hours	<b>0</b>	0	0	500
Oil Changed	<b>N/A</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>13.3</b>	12.7	12.4	12.7
Base Number (BN)	mg KOH/g	<b>10.2</b>	10.3	10.1	10.0
Oxidation (PA)	%	<b>81</b>	80	79	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>0.3</b>	0.3	0.2	0.2
Nitration (PA)	%	<b>61</b>	62	63	62
Sulfation (PA)	%	<b>61</b>	60	59	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>8</b>	4	5	4
Sodium	ppm	<b>0</b>	3	3	0
Potassium	ppm	<b>1</b>	<1	1	2



### WEAR METALS

Iron	ppm	<b>16</b>	8	9	12
Copper	ppm	<b>2</b>	2	<1	3
Lead	ppm	<b>0</b>	0	<1	<1
Tin	ppm	<b>0</b>	0	<1	1
Aluminum	ppm	<b>4</b>	4	4	7
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>44</b>	44	49	92
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	<1



### ADDITIVES

Calcium	ppm	<b>1650</b>	1670	1829	1699
Magnesium	ppm	<b>529</b>	542	557	497
Zinc	ppm	<b>1177</b>	1197	1210	1134
Phosphorus	ppm	<b>851</b>	985	979	921
Barium	ppm	<b>5</b>	0	0	3
Boron	ppm	<b>34</b>	26	29	41

**Depot:** RIPTAM  
**Unique No:** 10863255  
**Signed:** Wes Davis  
**Report Date:** 06 Feb 2024



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## VOLVO GRAPHS

