



# CONSTRUCTION EQUIPMENT

578918 VOLVO L110H 631271 - DIESEL ENGINE



**Sample No:** VCP411551  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 578918



## SAMPLE INFORMATION

Sample Number	VCP411551	VCP320488	---	---
Sample Date	15 Jul 2023	15 Aug 2021	---	---
Machine Hours	2251	7533	---	---
Oil Hours	500	1500	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

**RIPA AND ASSOCIATES**  
 10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: ROBERT TURNER  
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 T:  
 F:

## OIL CONDITION

Visc @ 100°C	cSt	█ 13.0	█ 13.5	---	---
Base Number (BN)	mg KOH/g	█ 9.6	---	---	---
Oxidation (PA)	%	80	93	---	---

## 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 %	%	█ 0.3	█ 0.4	---	---
Nitration (PA)	%	69	88	---	---
Sulfation (PA)	%	58	66	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 13	█ 6	---	---
Sodium	ppm	█ 3	█ 3	---	---
Potassium	ppm	█ 3	█ <1	---	---

## WEAR METALS

Iron	ppm	█ 24	█ 20	---	---
Copper	ppm	█ 2	█ 2	---	---
Lead	ppm	█ <1	█ <1	---	---
Tin	ppm	█ 2	█ 1	---	---
Aluminum	ppm	█ 11	█ 5	---	---
Chromium	ppm	█ 4	█ <1	---	---
Molybdenum	ppm	█ 49	█ 42	---	---
Nickel	ppm	█ <1	█ <1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	█ <1	<1	---	---
Manganese	ppm	█ 1	█ <1	---	---
Vanadium	ppm	0	0	---	---

## ADDITIVES

Calcium	ppm	█ 1737	█ 1757	---	---
Magnesium	ppm	█ 551	█ 515	---	---
Zinc	ppm	█ 1203	█ 1105	---	---
Phosphorus	ppm	█ 976	█ 960	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 25	█ 26	---	---

**Depot:** RIPTAM  
**Unique No:** 10601867  
**Signed:** Don Baldrige  
**Report Date:** 12 Aug 2023



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## GRAPHS

