



# CONSTRUCTION EQUIPMENT

353464 VOLVO L110H 632536 - DIESEL ENGINE



**Sample No:** VCP434697  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 353464



## SAMPLE INFORMATION

Sample Number	VCP434697	VCP427044	---	---
Sample Date	02 Sep 2023	22 Jun 2023	---	---
Machine Hours	1051	539	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

**COVANTA LAKES**  
 3830 ROGERS INDUSTRIAL PARK ROAD  
 OKAHUMPKA, FL  
 US 32762  
 Contact: SERVICE MANAGER

## OIL CONDITION

Visc @ 100°C	cSt	█ 12.7	█ 12.6	---	---
Base Number (BN)	mg KOH/g	█ 9.7	█ 9.7	---	---
Oxidation (PA)	%	79	75	---	---

T:  
F:

## Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

## CONTAMINATION

Soot %	%	█ 0.2	█ 0.2	---	---
Nitration (PA)	%	56	59	---	---
Sulfation (PA)	%	60	62	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	▲ 35	█ 27	---	---
Sodium	ppm	█ 3	█ 3	---	---
Potassium	ppm	█ 0	█ 3	---	---

## WEAR METALS

Iron	ppm	█ 12	█ 21	---	---
Copper	ppm	█ 4	█ 10	---	---
Lead	ppm	█ <1	█ 1	---	---
Tin	ppm	█ 1	█ 3	---	---
Aluminum	ppm	▲ 17	▲ 59	---	---
Chromium	ppm	█ <1	█ 3	---	---
Molybdenum	ppm	█ 46	█ 51	---	---
Nickel	ppm	█ 0	█ <1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ <1	█ 2	---	---
Vanadium	ppm	<1	0	---	---

## ADDITIVES

Calcium	ppm	█ 1816	█ 1485	---	---
Magnesium	ppm	█ 544	█ 638	---	---
Zinc	ppm	█ 1136	█ 1117	---	---
Phosphorus	ppm	█ 961	█ 916	---	---
Barium	ppm	█ 0	25	---	---
Boron	ppm	█ 40	█ 75	---	---

**Depot:** COVOKA  
**Unique No:** 10634955  
**Signed:** Don Baldrige  
**Report Date:** 09 Sep 2023



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## GRAPHS

