



# CONSTRUCTION EQUIPMENT

581592 E&H TAKEUCHI TL12V2 412103590 - DIESEL ENGINE



**Sample No:** VCP392966  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 581592 E&H



## SAMPLE INFORMATION

Sample Number	VCP392966	VCP347184	---	---
Sample Date	02 Aug 2023	16 Dec 2021	---	---
Machine Hours	1065	621	---	---
Oil Hours	500	122	---	---
Oil Changed	Changed	Not Chngd	---	---
Sample Status	ABNORMAL	NORMAL	---	---

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## OIL CONDITION

Visc @ 100°C	cSt	█ 12.7	█ 13.3	---	---
Base Number (BN)	mg KOH/g	█ 9.1	█ 11.6	---	---
Oxidation (PA)	%	82	86	---	---

## CONTAMINATION

Soot %	%	█ 0.8	█ 0.8	---	---
Nitration (PA)	%	80	74	---	---
Sulfation (PA)	%	64	66	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	▲ 30	█ 13	---	---
Sodium	ppm	█ 14	█ 4	---	---
Potassium	ppm	█ <1	█ 18	---	---

## Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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.

## WEAR METALS

Iron	ppm	█ 77	█ 23	---	---
Copper	ppm	█ 25	█ 16	---	---
Lead	ppm	█ 0	█ <1	---	---
Tin	ppm	█ <1	█ <1	---	---
Aluminum	ppm	▲ 35	█ 3	---	---
Chromium	ppm	█ 2	█ <1	---	---
Molybdenum	ppm	█ 52	█ 55	---	---
Nickel	ppm	█ <1	█ <1	---	---
Titanium	ppm	<1	█ <1	---	---
Silver	ppm	█ 0	█ 0	---	---
Manganese	ppm	█ 3	█ <1	---	---
Vanadium	ppm	<1	0	---	---

## ADDITIVES

Calcium	ppm	█ 1887	█ 1951	---	---
Magnesium	ppm	█ 580	█ 492	---	---
Zinc	ppm	█ 1218	█ 1092	---	---
Phosphorus	ppm	█ 958	█ 911	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 37	█ 30	---	---

**Depot:** VOLVO0093  
**Unique No:** 10619897  
**Signed:** Jonathan Hester  
**Report Date:** 29 Aug 2023



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## GRAPHS

