



# CONSTRUCTION EQUIPMENT

19612 VORTEX DRAINAG VOLVO EC220E 314524 - DIESEL ENGINE



**Sample No:** VCP415487  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 19612 VORTEX DRAINAG



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## SAMPLE INFORMATION

Sample Number	<b>VCP415487</b>	VCP05692312	VCP375460	---
Sample Date	<b>12 Sep 2023</b>	13 Nov 2022	31 May 2022	---
Machine Hours	<b>1497</b>	978	672	---
Oil Hours	<b>510</b>	0	0	---
Oil Changed	<b>Changed</b>	N/A	Changed	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

## OIL CONDITION

Visc @ 100°C	cSt	<b>14.0</b>	12.8	14.0	---
Base Number (BN)	mg KOH/g	<b>8.9</b>	11.7	6.4	---
Oxidation (PA)	%	<b>58</b>	82	52	---

## CONTAMINATION

Soot %	%	<b>0.1</b>	0.1	0.1	---
Nitration (PA)	%	<b>55</b>	59	68	---
Sulfation (PA)	%	<b>49</b>	64	57	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>5</b>	5	12	---
Sodium	ppm	<b>4</b>	0	3	---
Potassium	ppm	<b>1</b>	2	3	---

## WEAR METALS

Iron	ppm	<b>14</b>	7	22	---
Copper	ppm	<b>2</b>	1	9	---
Lead	ppm	<b>0</b>	0	2	---
Tin	ppm	<b>&lt;1</b>	<1	3	---
Aluminum	ppm	<b>2</b>	2	7	---
Chromium	ppm	<b>1</b>	<1	4	---
Molybdenum	ppm	<b>59</b>	40	5	---
Nickel	ppm	<b>0</b>	0	5	---
Titanium	ppm	<b>0</b>	<1	5	---
Silver	ppm	<b>0</b>	<1	0	---
Manganese	ppm	<b>&lt;1</b>	<1	4	---
Vanadium	ppm	<b>0</b>	0	0	---

## ADDITIVES

Calcium	ppm	<b>1279</b>	1710	2592	---
Magnesium	ppm	<b>927</b>	443	136	---
Zinc	ppm	<b>1289</b>	1048	1129	---
Phosphorus	ppm	<b>1077</b>	871	1022	---
Barium	ppm	<b>0</b>	0	0	---
Boron	ppm	<b>8</b>	43	7	---

## 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.

**Depot:** VOLVO8769  
**Unique No:** 10662248  
**Signed:** Don Baldrige  
**Report Date:** 27 Sep 2023



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## GRAPHS

