



# CONSTRUCTION EQUIPMENT

RS0034558 VOLVO L180H 5355 - DIESEL ENGINE



**Sample No:** VCP426958  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** RS0034558



## SAMPLE INFORMATION

Sample Number	<b>VCP426958</b>	VCP402675	VCP345502	---
Sample Date	<b>06 Jul 2023</b>	24 Mar 2023	07 Apr 2022	---
Machine Hours	<b>3338</b>	2829	1523	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>NORMAL</b>	NORMAL	ABNORMAL	---

## COWIN EQUIPMENT COMPANY

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## OIL CONDITION

Visc @ 100°C	cSt	<b>12.8</b>	12.8	13.0	---
Base Number (BN)	mg KOH/g	<b>9.9</b>	9.2	11.2	---
Oxidation (PA)	%	<b>82</b>	84	84	---



## CONTAMINATION

Soot %	%	<b>0.1</b>	0.2	0.1	---
Nitration (PA)	%	<b>59</b>	75	56	---
Sulfation (PA)	%	<b>61</b>	61	66	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>6</b>	6	7	---
Sodium	ppm	<b>0</b>	2	2	---
Potassium	ppm	<b>2</b>	3	0	---

## 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.



## WEAR METALS

Iron	ppm	<b>5</b>	7	5	---
Copper	ppm	<b>1</b>	2	33	---
Lead	ppm	<b>&lt;1</b>	<1	3	---
Tin	ppm	<b>&lt;1</b>	<1	2	---
Aluminum	ppm	<b>2</b>	2	2	---
Chromium	ppm	<b>0</b>	<1	0	---
Molybdenum	ppm	<b>56</b>	47	41	---
Nickel	ppm	<b>0</b>	0	1	---
Titanium	ppm	<b>0</b>	0	<1	---
Silver	ppm	<b>&lt;1</b>	0	0	---
Manganese	ppm	<b>&lt;1</b>	<1	<1	---
Vanadium	ppm	<b>0</b>	0	0	---



## ADDITIVES

Calcium	ppm	<b>2190</b>	1853	1771	---
Magnesium	ppm	<b>637</b>	574	538	---
Zinc	ppm	<b>1301</b>	1017	1121	---
Phosphorus	ppm	<b>1113</b>	840	973	---
Barium	ppm	<b>2</b>	0	0	---
Boron	ppm	<b>49</b>	31	52	---

**Depot:** VOLVO8247  
**Unique No:** 10603060  
**Signed:** Wes Davis  
**Report Date:** 14 Aug 2023



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## GRAPHS

