



# CONSTRUCTION EQUIPMENT

W14799 VOLVO L220H 2915 - DIESEL ENGINE



**Sample No:** VCP435134  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** W14799



## SAMPLE INFORMATION

Sample Number	<b>VCP435134</b>	VCP426809	VCP381337	VCP374227
Sample Date	<b>20 Oct 2023</b>	02 Aug 2023	14 Feb 2023	12 Sep 2022
Machine Hours	<b>5498</b>	5035	4525	4189
Oil Hours	<b>0</b>	500	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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## OIL CONDITION

Visc @ 100°C	cSt	<b>12.6</b>	12.6	12.8	12.9
Base Number (BN)	mg KOH/g	<b>9.4</b>	5.2	6.5	10.7
Oxidation (PA)	%	<b>79</b>	74	94	86



## CONTAMINATION

Soot %	%	<b>0.2</b>	0.8	0.5	0.2
Nitration (PA)	%	<b>61</b>	68	94	61
Sulfation (PA)	%	<b>59</b>	56	69	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>8</b>	7	8	6
Sodium	ppm	<b>2</b>	3	3	1
Potassium	ppm	<b>0</b>	<1	0	<1



## WEAR METALS

Iron	ppm	<b>4</b>	6	5	4
Copper	ppm	<b>&lt;1</b>	2	<1	<1
Lead	ppm	<b>0</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>2</b>	<1	<1	3
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>50</b>	41	43	40
Nickel	ppm	<b>0</b>	<1	<1	0
Titanium	ppm	<b>0</b>	<1	0	0
Silver	ppm	<b>0</b>	<1	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	0	0



## ADDITIVES

Calcium	ppm	<b>1692</b>	1722	1659	1509
Magnesium	ppm	<b>550</b>	524	530	457
Zinc	ppm	<b>1160</b>	973	922	867
Phosphorus	ppm	<b>915</b>	792	753	717
Barium	ppm	<b>0</b>	0	0	2
Boron	ppm	<b>39</b>	41	49	47

## 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:** VOLVO0080  
**Unique No:** 10727225  
**Signed:** Wes Davis  
**Report Date:** 07 Nov 2023



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## GRAPHS

