



# CONSTRUCTION EQUIPMENT

## 225927 WM VOLVO L220G 12593 - DIESEL ENGINE



**Sample No:** VCP441952  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 225927 WM



### SAMPLE INFORMATION

Sample Number	<b>VCP441952</b>	VCP403239	VCP403939	VCP239103
Sample Date	<b>12 Apr 2024</b>	07 Nov 2023	12 Jul 2023	17 Aug 2020
Machine Hours	<b>7996</b>	7898	7856	6904
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Not Changd	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ATTENTION	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.9</b>	12.9	11.6	13.2
Base Number (BN)	mg KOH/g	<b>10.9</b>	10.9	10.1	---
Oxidation (PA)	%	<b>77</b>	76	76	76

### 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.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.4</b>	0.1	0.3	0.1
Nitration (PA)	%	<b>46</b>	42	51	43
Sulfation (PA)	%	<b>61</b>	60	60	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	0.4	<1.0
Silicon	ppm	<b>6</b>	8	6	6
Sodium	ppm	<b>&lt;1</b>	1	2	6
Potassium	ppm	<b>0</b>	2	<1	<1



### WEAR METALS

Iron	ppm	<b>12</b>	6	24	4
Copper	ppm	<b>7</b>	2	8	1
Lead	ppm	<b>0</b>	0	<1	0
Tin	ppm	<b>0</b>	0	<1	0
Aluminum	ppm	<b>8</b>	3	6	0
Chromium	ppm	<b>&lt;1</b>	0	<1	0
Molybdenum	ppm	<b>43</b>	41	36	35
Nickel	ppm	<b>0</b>	<1	3	<1
Titanium	ppm	<b>0</b>	<1	0	<1
Silver	ppm	<b>0</b>	0	0	3
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1688</b>	1583	1445	1475
Magnesium	ppm	<b>525</b>	479	423	480
Zinc	ppm	<b>1099</b>	1066	989	944
Phosphorus	ppm	<b>956</b>	907	817	843
Barium	ppm	<b>0</b>	0	<1	0
Boron	ppm	<b>69</b>	78	64	132

**Depot:** VOLVO1271  
**Unique No:** 10994338  
**Signed:** Wes Davis  
**Report Date:** 25 Apr 2024



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## GRAPHS

