



# CONSTRUCTION EQUIPMENT

## 621307 VOLVO L220H 2061 - DIESEL ENGINE



**Sample No:** VCP442770  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 621307



### SAMPLE INFORMATION

Sample Number	<b>VCP442770</b>	VCP424312	VCP367800	VCP176906
Sample Date	<b>26 Nov 2023</b>	25 May 2023	14 Nov 2022	16 May 2016
Machine Hours	<b>16027</b>	15411	14690	2409
Oil Hours	<b>500</b>	721	500	0
Oil Changed	<b>Changed</b>	Changed	Changed	N/A
Sample Status	<b>NORMAL</b>	ATTENTION	NORMAL	NORMAL

**FERROUS PROCESSING AND TRADING**  
 3400 E LAFAYETTE  
 DETROIT, MI  
 US 48207  
 Contact: A.V. WEBB



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	13.4	13.3	13.7
Base Number (BN)	mg KOH/g	<b>6.3</b>	9.3	7.2	---
Oxidation (PA)	%	<b>57</b>	78	63	52

T:  
F:



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.2	0.2	0
Nitration (PA)	%	<b>74</b>	66	83	50
Sulfation (PA)	%	<b>54</b>	60	58	50
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>2</b>	5	4	5
Sodium	ppm	<b>2</b>	<1	<1	6
Potassium	ppm	<b>&lt;1</b>	0	2	1

### 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>0</b>	5	4	4
Copper	ppm	<b>0</b>	<1	<1	2
Lead	ppm	<b>0</b>	0	<1	1
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>2</b>	0	2	2
Chromium	ppm	<b>0</b>	<1	0	<1
Molybdenum	ppm	<b>66</b>	49	74	43
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1967</b>	1784	2217	1305
Magnesium	ppm	<b>97</b>	496	97	698
Zinc	ppm	<b>1176</b>	1205	1210	966
Phosphorus	ppm	<b>978</b>	984	1012	902
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>47</b>	53	41	52

**Depot:** FERDET  
**Unique No:** 10764779  
**Signed:** Wes Davis  
**Report Date:** 30 Nov 2023



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## GRAPHS

