



# CONSTRUCTION EQUIPMENT

## 2610-1 VOLVO EC300DL 210252 - DIESEL ENGINE



**Sample No:** VCP407771  
**Oil Type:** CHEVRON DELO 400 MULTIGRADE 15W40  
**Job No:** 2610-1



### SAMPLE INFORMATION

Sample Number	<b>VCP407771</b>	VCP377885	VCP288147	VCP277707
Sample Date	<b>30 Aug 2023</b>	01 Sep 2022	21 Dec 2020	10 Apr 2020
Machine Hours	<b>7024</b>	6002	5306	4977
Oil Hours	<b>500</b>	0	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	MARGINAL	ABNORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>14.3</b>	13.2	13.9	14.4
Base Number (BN)	mg KOH/g	<b>10.4</b>	11.7	---	---
Oxidation (PA)	%	<b>84</b>	90	83	76

### CONTAMINATION

Soot %	%	<b>1.3</b>	1.3	0.7	1.2
Nitration (PA)	%	<b>83</b>	93	63	77
Sulfation (PA)	%	<b>68</b>	71	66	63
Glycol	%	<b>NEG</b>	NEG	NEG	0.0
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>13</b>	8	8	13
Sodium	ppm	<b>6</b>	20	47	199
Potassium	ppm	<b>0</b>	2	7	41

### 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>32</b>	58	55	92
Copper	ppm	<b>4</b>	2	2	3
Lead	ppm	<b>0</b>	<1	2	<1
Tin	ppm	<b>1</b>	2	0	2
Aluminum	ppm	<b>9</b>	13	18	23
Chromium	ppm	<b>1</b>	2	2	3
Molybdenum	ppm	<b>59</b>	40	36	42
Nickel	ppm	<b>0</b>	1	2	<1
Titanium	ppm	<b>&lt;1</b>	<1	<1	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>1789</b>	1553	1775	1545
Magnesium	ppm	<b>581</b>	549	494	430
Zinc	ppm	<b>1227</b>	1054	887	786
Phosphorus	ppm	<b>1003</b>	838	778	693
Barium	ppm	<b>0</b>	<1	0	0
Boron	ppm	<b>80</b>	28	39	24

**Depot:** VOLVO1023  
**Unique No:** 10636134  
**Signed:** Wes Davis  
**Report Date:** 11 Sep 2023



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## GRAPHS

