



# CONSTRUCTION EQUIPMENT

## A11676 VOLVO L70H 622711 - DIESEL ENGINE



**Sample No:** VCP441836  
**Oil Type:** MOBIL 15W40  
**Job No:** A11676



### SAMPLE INFORMATION

Sample Number	<b>VCP441836</b>	VCP413724	VCP399870	VCP378632
Sample Date	<b>12 Dec 2023</b>	11 Aug 2023	08 Mar 2023	02 Aug 2022
Machine Hours	<b>4890</b>	4620	4425	4000
Oil Hours	<b>250</b>	250	500	250
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>13.3</b>	13.5	12.7	12.9
Base Number (BN)	mg KOH/g	<b>6.4</b>	7.6	9.0	11.6
Oxidation (PA)	%	<b>43</b>	40	63	84



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.1	0.2	0.3
Nitration (PA)	%	<b>54</b>	54	63	63
Sulfation (PA)	%	<b>45</b>	43	53	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	7	7	12
Sodium	ppm	<b>&lt;1</b>	0	2	2
Potassium	ppm	<b>2</b>	2	<1	0



### WEAR METALS

Iron	ppm	<b>3</b>	7	6	13
Copper	ppm	<b>0</b>	<1	<1	<1
Lead	ppm	<b>0</b>	<1	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	1
Aluminum	ppm	<b>5</b>	13	4	11
Chromium	ppm	<b>&lt;1</b>	1	<1	2
Molybdenum	ppm	<b>26</b>	17	30	50
Nickel	ppm	<b>0</b>	2	0	<1
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>&lt;1</b>	2	0	0
Manganese	ppm	<b>&lt;1</b>	<1	1	<1
Vanadium	ppm	<b>0</b>	<1	<1	<1



### ADDITIVES

Calcium	ppm	<b>1714</b>	2103	1834	1602
Magnesium	ppm	<b>360</b>	195	338	477
Zinc	ppm	<b>1086</b>	1096	1099	1035
Phosphorus	ppm	<b>905</b>	912	874	843
Barium	ppm	<b>0</b>	0	0	<1
Boron	ppm	<b>15</b>	11	31	49

### 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 acceptable for the time in service.

**Depot:** JAAPHI  
**Unique No:** 10795633  
**Signed:** Don Baldrige  
**Report Date:** 21 Dec 2023



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## GRAPHS

