



# CONSTRUCTION EQUIPMENT

W05003921 VOLVO A40G 341170 - DIESEL ENGINE



**Sample No:** VCP419407  
**Oil Type:** MOBIL 15W40  
**Job No:** W05003921



## SAMPLE INFORMATION

Sample Number	<b>VCP419407</b>	VCP420836	VCP416117	VCP384503
Sample Date	<b>26 Oct 2023</b>	29 Aug 2023	26 Jul 2023	18 May 2023
Machine Hours	<b>10875</b>	10638	10440	9979
Oil Hours	<b>250</b>	500	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>	13.2	13.1	13.1
Base Number (BN)	mg KOH/g	<b>9.1</b>	8.8	8.0	8.3
Oxidation (PA)	%	<b>70</b>	69	70	68



## CONTAMINATION

Soot %	%	<b>0.1</b>	0.1	0.1	0.1
Nitration (PA)	%	<b>59</b>	60	72	65
Sulfation (PA)	%	<b>66</b>	65	63	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	5	5	5
Sodium	ppm	<b>0</b>	2	2	2
Potassium	ppm	<b>1</b>	3	<1	2



## WEAR METALS

Iron	ppm	<b>5</b>	4	5	5
Copper	ppm	<b>&lt;1</b>	<1	<1	0
Lead	ppm	<b>0</b>	<1	<1	1
Tin	ppm	<b>0</b>	0	0	<1
Aluminum	ppm	<b>3</b>	2	2	2
Chromium	ppm	<b>&lt;1</b>	<1	0	<1
Molybdenum	ppm	<b>135</b>	126	105	106
Nickel	ppm	<b>&lt;1</b>	0	0	<1
Titanium	ppm	<b>0</b>	<1	0	0
Silver	ppm	<b>&lt;1</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	<1	<1



## ADDITIVES

Calcium	ppm	<b>1497</b>	1743	1834	1647
Magnesium	ppm	<b>654</b>	726	567	581
Zinc	ppm	<b>841</b>	1001	1012	1004
Phosphorus	ppm	<b>741</b>	822	833	838
Barium	ppm	<b>4</b>	0	0	0
Boron	ppm	<b>437</b>	357	293	248

## 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:** VOLVO0002  
**Unique No:** 10724914  
**Signed:** Jonathan Hester  
**Report Date:** 03 Nov 2023



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## GRAPHS

