



# CONSTRUCTION EQUIPMENT

W05003990 VOLVO A45G 342679 - DIESEL ENGINE



**Sample No:** VCP189046  
**Oil Type:** MOBIL 15W40  
**Job No:** W05003990



## SAMPLE INFORMATION

Sample Number	<b>VCP189046</b>	VCP363670	VCP420887	VCP420844
Sample Date	<b>19 Dec 2023</b>	09 Nov 2023	05 Oct 2023	29 Aug 2023
Machine Hours	<b>8232</b>	7942	7666	7349
Oil Hours	<b>250</b>	250	250	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>12.9</b>	12.9	13.1	12.8
Base Number (BN)	mg KOH/g	<b>8.6</b>	9.2	8.4	8.8
Oxidation (PA)	%	<b>65</b>	66	62	63

## 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>0.1</b>	0.1	0.1	0.2
Nitration (PA)	%	<b>53</b>	50	50	53
Sulfation (PA)	%	<b>63</b>	61	61	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	5	4	5
Sodium	ppm	<b>1</b>	0	2	2
Potassium	ppm	<b>0</b>	<1	0	3



## WEAR METALS

Iron	ppm	<b>1</b>	2	3	4
Copper	ppm	<b>&lt;1</b>	0	<1	3
Lead	ppm	<b>0</b>	2	0	<1
Tin	ppm	<b>0</b>	<1	<1	0
Aluminum	ppm	<b>3</b>	3	4	3
Chromium	ppm	<b>0</b>	0	<1	<1
Molybdenum	ppm	<b>115</b>	101	125	128
Nickel	ppm	<b>0</b>	<1	<1	0
Titanium	ppm	<b>0</b>	0	<1	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	<1	<1



## ADDITIVES

Calcium	ppm	<b>1470</b>	1498	1459	1660
Magnesium	ppm	<b>639</b>	617	627	702
Zinc	ppm	<b>878</b>	948	778	951
Phosphorus	ppm	<b>771</b>	811	670	784
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>333</b>	291	359	357

**Depot:** VOLVO0002  
**Unique No:** 10803554  
**Signed:** Don Baldrige  
**Report Date:** 26 Dec 2023



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## VOLVO GRAPHS

