



# CONSTRUCTION EQUIPMENT

## VOLVO A45G 352081 - DIESEL ENGINE



**Sample No:** VCP435304  
**Oil Type:** MOBIL 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP435304</b>	VCP405437	VCP360520	VCP346210
Sample Date	<b>23 Oct 2023</b>	08 Feb 2023	05 Jul 2022	26 May 2022
Machine Hours	<b>7014</b>	6437	5403	5189
Oil Hours	<b>0</b>	500	215	1000
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>12.4</b>	12.8	12.6	13.0
Base Number (BN)	mg KOH/g	<b>8.0</b>	8.2	10.1	6.4
Oxidation (PA)	%	<b>65</b>	68	60	69



### CONTAMINATION

Soot %	%	<b>0.4</b>	0.4	0.2	0.5
Nitration (PA)	%	<b>79</b>	82	66	93
Sulfation (PA)	%	<b>57</b>	58	57	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>0.3</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	5	3	5
Sodium	ppm	<b>0</b>	2	<1	2
Potassium	ppm	<b>2</b>	0	1	2



### WEAR METALS

Iron	ppm	<b>10</b>	10	6	19
Copper	ppm	<b>&lt;1</b>	<1	3	2
Lead	ppm	<b>1</b>	2	<1	1
Tin	ppm	<b>0</b>	<1	<1	1
Aluminum	ppm	<b>&lt;1</b>	2	1	2
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>70</b>	66	54	45
Nickel	ppm	<b>1</b>	1	0	1
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	1
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1213</b>	1332	1419	1329
Magnesium	ppm	<b>907</b>	893	734	859
Zinc	ppm	<b>1236</b>	1293	1247	1231
Phosphorus	ppm	<b>1024</b>	1030	1025	948
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>17</b>	41	15	20

### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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:** VOLVO0077  
**Unique No:** 10724890  
**Signed:** Wes Davis  
**Report Date:** 06 Nov 2023



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## GRAPHS

