



# CONSTRUCTION EQUIPMENT

## SWO-067654 VOLVO A45G 352708 - DIESEL ENGINE



**Sample No:** VCP431076  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SWO-067654



### SAMPLE INFORMATION

Sample Number	<b>VCP431076</b>	VCP433248	VCP424300	VCP396764
Sample Date	<b>20 Nov 2023</b>	11 Sep 2023	06 Jul 2023	24 Mar 2023
Machine Hours	<b>4925</b>	4418	3920	3429
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	ATTENTION	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.9</b>	12.0	12.7	12.5
Base Number (BN)	mg KOH/g	<b>9.8</b>	7.1	10.3	9.9
Oxidation (PA)	%	<b>75</b>	72	79	77



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.4	0.2	0.3
Nitration (PA)	%	<b>53</b>	82	58	63
Sulfation (PA)	%	<b>58</b>	62	61	60
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	0.3	<1.0	<1.0
Silicon	ppm	<b>4</b>	7	4	6
Sodium	ppm	<b>2</b>	6	2	2
Potassium	ppm	<b>0</b>	2	1	0



### WEAR METALS

Iron	ppm	<b>3</b>	12	6	11
Copper	ppm	<b>&lt;1</b>	5	<1	1
Lead	ppm	<b>0</b>	2	1	<1
Tin	ppm	<b>&lt;1</b>	3	<1	<1
Aluminum	ppm	<b>&lt;1</b>	6	2	2
Chromium	ppm	<b>0</b>	<1	0	<1
Molybdenum	ppm	<b>43</b>	26	40	41
Nickel	ppm	<b>&lt;1</b>	3	2	2
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	1
Vanadium	ppm	<b>&lt;1</b>	0	<1	<1



### ADDITIVES

Calcium	ppm	<b>1584</b>	1505	1654	1571
Magnesium	ppm	<b>571</b>	668	476	513
Zinc	ppm	<b>1177</b>	948	1039	1042
Phosphorus	ppm	<b>892</b>	738	844	832
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>51</b>	44	54	51

### 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:** SAIBIR  
**Unique No:** 10755220  
**Signed:** Jonathan Hester  
**Report Date:** 27 Nov 2023



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## VOLVO GRAPHS

