



# CONSTRUCTION EQUIPMENT

SWO-064939 VOLVO A45G 352973 - DIESEL ENGINE



**Sample No:** VCP426207  
**Oil Type:** DIESEL ENGINE OIL SAE 40  
**Job No:** SWO-064939



## SAMPLE INFORMATION

Sample Number	<b>VCP426207</b>	VCP404586	VCP405252	VCP388379
Sample Date	<b>24 Aug 2023</b>	06 Jun 2023	21 Mar 2023	14 Nov 2022
Machine Hours	<b>3044</b>	2472	2001	1521
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ATTENTION	NORMAL

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## OIL CONDITION

Visc @ 100°C	cSt	█ <b>12.5</b>	█ 12.8	▲ 12.1	█ 12.6
Base Number (BN)	mg KOH/g	█ <b>9.7</b>	█ 9.6	█ 10.8	█ 11.9
Oxidation (PA)	%	<b>78</b>	85	78	82

## CONTAMINATION

Soot %	%	█ <b>0.3</b>	█ 0.3	█ 0.2	█ 0.1
Nitration (PA)	%	<b>59</b>	59	56	60
Sulfation (PA)	%	<b>60</b>	62	60	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	█ 0.4	<1.0
Silicon	ppm	█ <b>5</b>	█ 6	█ 6	█ 5
Sodium	ppm	█ <b>&lt;1</b>	█ 3	█ 3	█ 0
Potassium	ppm	█ <b>&lt;1</b>	█ 2	█ <1	█ 1

## WEAR METALS

Iron	ppm	█ <b>7</b>	█ 10	█ 7	█ 6
Copper	ppm	█ <b>&lt;1</b>	█ <1	█ 2	█ 5
Lead	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Tin	ppm	█ <b>1</b>	█ 2	█ 1	█ 1
Aluminum	ppm	█ <b>1</b>	█ 3	█ 2	█ <1
Chromium	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ 0
Molybdenum	ppm	█ <b>42</b>	█ 43	█ 41	█ 41
Nickel	ppm	█ <b>1</b>	█ 2	█ 1	█ 0
Titanium	ppm	█ <b>0</b>	█ 0	█ 0	█ <1
Silver	ppm	█ <b>0</b>	█ 0	█ 0	█ <1
Manganese	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Vanadium	ppm	<b>0</b>	<1	0	0

## ADDITIVES

Calcium	ppm	█ <b>1631</b>	█ 1715	█ 1680	█ 1742
Magnesium	ppm	█ <b>454</b>	█ 532	█ 497	█ 479
Zinc	ppm	█ <b>911</b>	█ 1192	█ 1115	█ 1087
Phosphorus	ppm	█ <b>756</b>	█ 978	█ 947	█ 921
Barium	ppm	█ <b>0</b>	█ 0	█ 2	█ 0
Boron	ppm	█ <b>34</b>	█ 50	█ 69	█ 57

## 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:** SAIBIR  
**Unique No:** 10630055  
**Signed:** Sean Felton  
**Report Date:** 01 Sep 2023



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## VOLVO GRAPHS

