



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 352339 - A40G - DIESEL ENGINE



**Sample No:** VCP395083  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP395083</b>	VCP400136	VCP288362	VCP278498
Sample Date	<b>06 Dec 2023</b>	18 Feb 2023	30 Oct 2020	15 Jul 2020
Machine Hours	<b>5859</b>	3149	1121	543
Oil Hours	<b>0</b>	500	500	0
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>12.6</b>	12.9	12.4	10.8
Base Number (BN)	mg KOH/g	<b>8.7</b>	10.1	---	---
Oxidation (PA)	%	<b>80</b>	83	76	88



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.3</b>	0.5	0.4	0.2
Nitration (PA)	%	<b>72</b>	76	67	77
Sulfation (PA)	%	<b>62</b>	63	58	68
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	0.6
Silicon	ppm	<b>6</b>	6	6	23
Sodium	ppm	<b>49</b>	<1	3	2
Potassium	ppm	<b>25</b>	1	<1	3



### WEAR METALS

Iron	ppm	<b>14</b>	11	10	20
Copper	ppm	<b>2</b>	3	73	68
Lead	ppm	<b>0</b>	1	<1	<1
Tin	ppm	<b>0</b>	1	2	3
Aluminum	ppm	<b>4</b>	3	3	4
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>46</b>	54	40	36
Nickel	ppm	<b>5</b>	5	<1	1
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	3
Vanadium	ppm	<b>0</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1602</b>	1679	1886	1751
Magnesium	ppm	<b>504</b>	499	455	465
Zinc	ppm	<b>1091</b>	1115	1119	937
Phosphorus	ppm	<b>943</b>	908	976	876
Barium	ppm	<b>0</b>	2	0	0
Boron	ppm	<b>59</b>	33	18	21

### 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:** VOLVO0090  
**Unique No:** 10780107  
**Signed:** Doug Bogart  
**Report Date:** 13 Dec 2023



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## GRAPHS

