



# CONSTRUCTION EQUIPMENT

## 24555 VOLVO A40G 352724 - DIESEL ENGINE



**Sample No:** VCP440948  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 24555



### SAMPLE INFORMATION

Sample Number	<b>VCP440948</b>	VCP370292	VCP390069	VCP368248
Sample Date	<b>19 Feb 2024</b>	29 Aug 2023	03 Mar 2023	01 Dec 2022
Machine Hours	<b>3630</b>	3195	0	2139
Oil Hours	<b>0</b>	500	0	0
Oil Changed	<b>Changed</b>	Changed	N/A	Changed
Sample Status	<b>ATTENTION</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.13</b>	12.7	12.9	12.7
Base Number (BN)	mg KOH/g	<b>11.0</b>	9.3	9.3	9.5
Oxidation (PA)	%	<b>77</b>	72	57	74

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.2</b>	0.2	0.2	0.2
Nitration (PA)	%	<b>63</b>	63	63	79
Sulfation (PA)	%	<b>57</b>	59	50	60
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>0.5</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>7</b>	6	2	5
Sodium	ppm	<b>3</b>	2	0	2
Potassium	ppm	<b>2</b>	<1	<1	0

### Diagnosis

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

### WEAR METALS

Iron	ppm	<b>9</b>	7	6	12
Copper	ppm	<b>3</b>	4	3	2
Lead	ppm	<b>&lt;1</b>	0	0	<1
Tin	ppm	<b>&lt;1</b>	<1	0	2
Aluminum	ppm	<b>4</b>	2	0	1
Chromium	ppm	<b>&lt;1</b>	<1	0	<1
Molybdenum	ppm	<b>48</b>	61	57	58
Nickel	ppm	<b>1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>1</b>	<1	0	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>1461</b>	1687	1108	1470
Magnesium	ppm	<b>432</b>	568	845	753
Zinc	ppm	<b>1044</b>	1114	1182	1192
Phosphorus	ppm	<b>855</b>	944	986	1023
Barium	ppm	<b>34</b>	2	<1	0
Boron	ppm	<b>75</b>	116	2	39

**Depot:** VOLVO3387  
**Unique No:** 10898157  
**Signed:** Jonathan Hester  
**Report Date:** 01 Mar 2024



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## GRAPHS

