



# CONSTRUCTION EQUIPMENT

## 12058 VOLVO A30D 12117 - DIESEL ENGINE



**Sample No:** VCP443155  
**Oil Type:** MOBIL 15W40  
**Job No:** 12058



### SAMPLE INFORMATION

Sample Number	<b>VCP443155</b>	VCP418606	VCP363762	VCP373620
Sample Date	<b>08 Feb 2024</b>	09 Jun 2023	11 Aug 2022	09 Aug 2022
Machine Hours	<b>12796</b>	12542	10465	10465
Oil Hours	<b>0</b>	0	250	250
Oil Changed	<b>N/A</b>	N/A	Changed	Changed
Sample Status	<b>ATTENTION</b>	ATTENTION	ATTENTION	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 12.1</b>	▲ 11.9	▲ 11.6	■ 12.7
Base Number (BN)	mg KOH/g	<b>■ 9.6</b>	■ 8.7	■ 10.9	■ 11.2
Oxidation (PA)	%	<b>76</b>	63	79	73

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>■ 0.2</b>	■ 0.2	■ 0.3	■ 0.4
Nitration (PA)	%	<b>51</b>	53	63	53
Sulfation (PA)	%	<b>59</b>	53	63	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<b>▲ 2.6</b>	<1.0
Silicon	ppm	<b>■ 5</b>	■ 2	■ 5	■ 5
Sodium	ppm	<b>■ 0</b>	■ 2	■ 0	■ 3
Potassium	ppm	<b>■ 1</b>	■ 1	■ 1	■ <1

### Diagnosis

No corrective action is recommended at this time. 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 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>■ 7</b>	■ 5	■ 11	■ 12
Copper	ppm	<b>■ 2</b>	■ 0	■ 2	■ 2
Lead	ppm	<b>■ 0</b>	■ 0	■ <1	■ 1
Tin	ppm	<b>■ &lt;1</b>	■ 0	■ <1	■ <1
Aluminum	ppm	<b>■ 2</b>	■ 10	■ 3	■ <1
Chromium	ppm	<b>■ 0</b>	■ 0	■ 0	■ <1
Molybdenum	ppm	<b>■ 37</b>	■ 29	■ 50	■ 47
Nickel	ppm	<b>■ 0</b>	■ 0	■ 0	■ <1
Titanium	ppm	<b>&lt;1</b>	0	<1	<1
Silver	ppm	<b>■ 0</b>	■ 0	<1	<1
Manganese	ppm	<b>■ &lt;1</b>	■ 0	■ <1	■ <1
Vanadium	ppm	<b>0</b>	0	0	<1

### ADDITIVES

Calcium	ppm	<b>■ 1517</b>	■ 1977	■ 1645	■ 1528
Magnesium	ppm	<b>■ 436</b>	■ 362	■ 450	■ 443
Zinc	ppm	<b>■ 1044</b>	■ 1114	■ 1058	■ 937
Phosphorus	ppm	<b>■ 930</b>	■ 915	■ 910	■ 762
Barium	ppm	<b>12</b>	■ 0	■ 0	■ <1
Boron	ppm	<b>■ 50</b>	■ 34	■ 61	■ 79

**Depot:** JAAPHI  
**Unique No:** 10876034  
**Signed:** Jonathan Hester  
**Report Date:** 15 Feb 2024



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## GRAPHS

