



# CONSTRUCTION EQUIPMENT

## VOLVO A40F 12382 - DIESEL ENGINE



**Sample No:** VCP379364  
**Oil Type:** MOBIL 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP379364</b>	VCP402322	VCP359546	VCP374995
Sample Date	<b>26 Jun 2023</b>	16 May 2023	13 Apr 2023	15 Mar 2023
Machine Hours	<b>13506</b>	13254	13019	12795
Oil Hours	<b>252</b>	235	224	302
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	ABNORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	█ <b>12.7</b>	█ 12.9	█ 12.7	█ 12.7
Base Number (BN)	mg KOH/g	█ <b>10.1</b>	█ 10.2	█ 9.5	█ 10.1
Oxidation (PA)	%	<b>82</b>	79	77	78

### CONTAMINATION

Soot %	%	█ <b>0.3</b>	█ 0.4	█ 0.4	█ 0.3
Nitration (PA)	%	<b>50</b>	53	51	57
Sulfation (PA)	%	<b>61</b>	62	60	61
Glycol	%	<b>NEG</b>	NEG	NEG	█ 0.0
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	█ <b>11</b>	█ 16	█ 17	▲ 24
Sodium	ppm	█ <b>2</b>	█ 2	█ 2	█ 0
Potassium	ppm	█ <b>1</b>	█ 4	█ 2	█ 2

### WEAR METALS

Iron	ppm	█ <b>7</b>	█ 11	█ 11	█ 9
Copper	ppm	█ <b>&lt;1</b>	█ 4	█ 1	█ 2
Lead	ppm	█ <b>0</b>	█ 2	█ <1	█ 1
Tin	ppm	█ <b>&lt;1</b>	█ 1	█ <1	█ <1
Aluminum	ppm	█ <b>4</b>	█ 6	█ 3	▲ 6
Chromium	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Molybdenum	ppm	█ <b>41</b>	█ 38	█ 40	█ 43
Nickel	ppm	█ <b>&lt;1</b>	█ <1	█ 0	█ <1
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>0</b>	<1	0	0

### ADDITIVES

Calcium	ppm	█ <b>1785</b>	█ 1736	█ 1709	█ 1774
Magnesium	ppm	█ <b>537</b>	█ 512	█ 511	█ 480
Zinc	ppm	█ <b>974</b>	█ 935	█ 934	█ 910
Phosphorus	ppm	█ <b>795</b>	█ 727	█ 775	█ 781
Barium	ppm	█ <b>0</b>	█ 0	█ 0	█ 0
Boron	ppm	█ <b>60</b>	█ 54	█ 57	█ 62

### 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:** SCHGRE  
**Unique No:** 10545749  
**Signed:** Wes Davis  
**Report Date:** 05 Jul 2023



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## GRAPHS

