



# CONSTRUCTION EQUIPMENT

## SPM632787 VOLVO EC480E 314792 - DIESEL ENGINE



**Sample No:** VCP429124  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SPM632787



### SAMPLE INFORMATION

Sample Number	<b>VCP429124</b>	VCP409262	VCP05838951	VCP369247
Sample Date	<b>02 Nov 2023</b>	07 Jul 2023	21 Apr 2023	26 Jan 2023
Machine Hours	<b>3011</b>	2503	1993	1441
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ATTENTION</b>	ATTENTION	ATTENTION	ATTENTION

### SIMS METAL MANAGEMENT

2500 S. PAULINA  
 CHICAGO, IL  
 US 60608  
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 T:  
 F:



### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 11.7</b>	▲ 12.1	▲ 12.0	▲ 11.9
Base Number (BN)	mg KOH/g	<b>■ 6.8</b>	■ 7.7	■ 4.8	■ 7.1
Oxidation (PA)	%	<b>63</b>	66	71	69

### 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. 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.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>■ 0.1</b>	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	<b>73</b>	74	78	73
Sulfation (PA)	%	<b>54</b>	57	56	56
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>■ 9</b>	■ 8	■ 7	■ 5
Sodium	ppm	<b>■ 0</b>	■ <1	■ 1	■ 2
Potassium	ppm	<b>■ 2</b>	■ <1	■ <1	■ 0



### WEAR METALS

Iron	ppm	<b>■ 7</b>	■ 9	■ 10	■ 7
Copper	ppm	<b>■ 11</b>	■ 11	■ 17	■ 23
Lead	ppm	<b>■ &lt;1</b>	■ 2	■ 0	■ <1
Tin	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ <1
Aluminum	ppm	<b>■ 2</b>	■ <1	■ <1	■ <1
Chromium	ppm	<b>■ 0</b>	■ <1	■ <1	■ <1
Molybdenum	ppm	<b>■ 56</b>	■ 60	■ 60	■ 56
Nickel	ppm	<b>■ 0</b>	■ 0	■ 0	■ 0
Titanium	ppm	<b>■ &lt;1</b>	■ 0	■ 0	■ 0
Silver	ppm	<b>■ 0</b>	■ 0	■ 0	■ 0
Manganese	ppm	<b>■ 0</b>	■ <1	■ <1	■ <1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>■ 1032</b>	■ 1115	■ 1155	■ 1114
Magnesium	ppm	<b>■ 853</b>	■ 1031	■ 1008	■ 882
Zinc	ppm	<b>■ 1096</b>	■ 1330	■ 1343	■ 1145
Phosphorus	ppm	<b>■ 901</b>	■ 1041	■ 918	■ 897
Barium	ppm	<b>■ 0</b>	■ 0	■ 0	■ 0
Boron	ppm	<b>■ 2</b>	■ 2	■ 0	■ 1

**Depot:** SIMCHIIL  
**Unique No:** 10766832  
**Signed:** Jonathan Hester  
**Report Date:** 04 Dec 2023



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## GRAPHS

