



# CONSTRUCTION EQUIPMENT

## SPM621942 WM VOLVO L90H 624824 - DIESEL ENGINE



**Sample No:** VCP398377  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SPM621942 WM



### SAMPLE INFORMATION

Sample Number	<b>VCP398377</b>	VCP413900	VCP395508	VCP420694
Sample Date	<b>18 Oct 2023</b>	03 Oct 2023	28 Sep 2023	12 Sep 2023
Machine Hours	<b>10540</b>	10193	10002	9830
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Not Changd</b>	Changed	Not Changd	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>14.5</b>	14.9	14.8	15.2
Base Number (BN)	mg KOH/g	<b>7.7</b>	9.1	9.4	9.0
Oxidation (PA)	%	<b>60</b>	61	56	58



### CONTAMINATION

Soot %	%	<b>0.5</b>	0.6	0.3	0.4
Nitration (PA)	%	<b>60</b>	61	50	58
Sulfation (PA)	%	<b>53</b>	55	51	53
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>16</b>	19	12	19
Sodium	ppm	<b>1</b>	2	2	3
Potassium	ppm	<b>2</b>	<1	0	2



### WEAR METALS

Iron	ppm	<b>8</b>	11	7	8
Copper	ppm	<b>&lt;1</b>	<1	<1	<1
Lead	ppm	<b>0</b>	<1	0	0
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>4</b>	4	2	4
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>64</b>	62	60	61
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	0	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1142</b>	1098	1131	1081
Magnesium	ppm	<b>1027</b>	1028	1013	1012
Zinc	ppm	<b>1301</b>	1343	1328	1304
Phosphorus	ppm	<b>1079</b>	1072	1077	1076
Barium	ppm	<b>7</b>	0	0	0
Boron	ppm	<b>0</b>	0	2	<1

### 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:** VOLVO8885  
**Unique No:** 10737823  
**Signed:** Wes Davis  
**Report Date:** 10 Nov 2023



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## GRAPHS

