



# CONSTRUCTION EQUIPMENT

## SW1029173 IAA 5 VOLVO L90H 625764 - DIESEL ENGINE



**Sample No:** VCP436943  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW1029173 IAA 5



### SAMPLE INFORMATION

Sample Number	<b>VCP436943</b>	VCP425242	VCP416981	VCP409771
Sample Date	<b>25 Jan 2024</b>	18 Oct 2023	03 Aug 2023	11 May 2023
Machine Hours	<b>7109</b>	6581	6094	5478
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.9</b>	13.5	13.3	13.3
Base Number (BN)	mg KOH/g	<b>10.0</b>	9.6	9.3	9.4
Oxidation (PA)	%	<b>78</b>	69	75	78

### 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.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.7</b>	0.7	0.8	0.7
Nitration (PA)	%	<b>68</b>	68	75	71
Sulfation (PA)	%	<b>61</b>	57	60	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	4	4	4
Sodium	ppm	<b>2</b>	0	2	2
Potassium	ppm	<b>1</b>	2	<1	<1



### WEAR METALS

Iron	ppm	<b>11</b>	10	14	13
Copper	ppm	<b>&lt;1</b>	1	<1	1
Lead	ppm	<b>&lt;1</b>	<1	1	0
Tin	ppm	<b>1</b>	<1	<1	<1
Aluminum	ppm	<b>4</b>	2	3	<1
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>45</b>	58	59	53
Nickel	ppm	<b>0</b>	<1	0	0
Titanium	ppm	<b>0</b>	<1	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	0	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>1383</b>	1212	1447	1420
Magnesium	ppm	<b>639</b>	803	887	814
Zinc	ppm	<b>1183</b>	1210	1353	1250
Phosphorus	ppm	<b>984</b>	913	1102	998
Barium	ppm	<b>0</b>	10	0	0
Boron	ppm	<b>18</b>	8	10	14

**Depot:** VOLVO6174  
**Unique No:** 10860027  
**Signed:** Wes Davis  
**Report Date:** 02 Feb 2024



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## GRAPHS

