



# CONSTRUCTION EQUIPMENT

## SW1029166 IAA 1 VOLVO L90H 624060 - DIESEL ENGINE



**Sample No:** VCP442976  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SW1029166 IAA 1



### SAMPLE INFORMATION

Sample Number	<b>VCP442976</b>	VCP412558	VCP353748	VCP351944
Sample Date	<b>25 Jan 2024</b>	06 Sep 2023	28 Nov 2022	03 Mar 2022
Machine Hours	<b>9623</b>	9122	8599	8110
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	ABNORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	14.9	14.4	13.5
Base Number (BN)	mg KOH/g	<b>9.1</b>	8.8	11.3	10.9
Oxidation (PA)	%	<b>76</b>	84	101	97



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.4</b>	0.5	0.5	0.4
Nitration (PA)	%	<b>73</b>	88	88	78
Sulfation (PA)	%	<b>58</b>	62	71	70
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	6	8	10
Sodium	ppm	<b>1</b>	2	3	2
Potassium	ppm	<b>1</b>	0	0	1



### WEAR METALS

Iron	ppm	<b>8</b>	16	10	12
Copper	ppm	<b>&lt;1</b>	<1	<1	<1
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>3</b>	▲ 12	4	7
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>49</b>	60	45	50
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	<1



### ADDITIVES

Calcium	ppm	<b>1241</b>	1426	1891	2066
Magnesium	ppm	<b>742</b>	988	569	597
Zinc	ppm	<b>1185</b>	1435	1259	1423
Phosphorus	ppm	<b>986</b>	1134	1019	1178
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>15</b>	11	27	39

### 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:** VOLVO6174  
**Unique No:** 10860026  
**Signed:** Wes Davis  
**Report Date:** 02 Feb 2024



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## VOLVO GRAPHS

