



# CONSTRUCTION EQUIPMENT

## SW1023776 IAA 6 VOLVO L90H 624060 - DIESEL ENGINE



**Sample No:** VCP412558  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SW1023776 IAA 6



### SAMPLE INFORMATION

Sample Number	<b>VCP412558</b>	VCP353748	VCP351944	VCP322451
Sample Date	<b>06 Sep 2023</b>	28 Nov 2022	03 Mar 2022	24 Aug 2021
Machine Hours	<b>9122</b>	8599	8110	7709
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>14.9</b>	14.4	13.5	13.6
Base Number (BN)	mg KOH/g	<b>8.8</b>	11.3	10.9	---
Oxidation (PA)	%	<b>84</b>	101	97	84



### CONTAMINATION

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



### WEAR METALS

Iron	ppm	<b>16</b>	10	12	8
Copper	ppm	<b>&lt;1</b>	<1	<1	<1
Lead	ppm	<b>0</b>	<1	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>▲ 12</b>	4	7	4
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>60</b>	45	50	43
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	<1	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>1426</b>	1891	2066	1702
Magnesium	ppm	<b>988</b>	569	597	516
Zinc	ppm	<b>1435</b>	1259	1423	1121
Phosphorus	ppm	<b>1134</b>	1019	1178	958
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>11</b>	27	39	35

### Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other 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:** 10644708  
**Signed:** Don Baldrige  
**Report Date:** 14 Sep 2023



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## GRAPHS

