



# CONSTRUCTION EQUIPMENT

## SW1024073 IAA 9 VOLVO L90H 625097 - DIESEL ENGINE



**Sample No:** VCP415363  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SW1024073 IAA 9



### SAMPLE INFORMATION

Sample Number	<b>VCP415363</b>	VCP425630	VCP354942	VCP359995
Sample Date	<b>14 Sep 2023</b>	16 May 2023	12 Sep 2022	17 May 2022
Machine Hours	<b>728</b>	6764	6161	5630
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ABNORMAL	NORMAL



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### OIL CONDITION

Visc @ 100°C	cSt	<b>14.0</b>	14.8	12.8	14.6
Base Number (BN)	mg KOH/g	<b>9.2</b>	8.5	10.1	10.6
Oxidation (PA)	%	<b>84</b>	81	74	100



### CONTAMINATION

Soot %	%	<b>0.8</b>	0.9	1	0.9
Nitration (PA)	%	<b>83</b>	92	84	89
Sulfation (PA)	%	<b>63</b>	63	69	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	7	6
Sodium	ppm	<b>3</b>	2	3	2
Potassium	ppm	<b>&lt;1</b>	2	1	1



### WEAR METALS

Iron	ppm	<b>19</b>	25	32	19
Copper	ppm	<b>1</b>	4	32	<1
Lead	ppm	<b>&lt;1</b>	<1	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>4</b>	4	5	4
Chromium	ppm	<b>1</b>	1	2	1
Molybdenum	ppm	<b>54</b>	63	47	44
Nickel	ppm	<b>&lt;1</b>	<1	2	<1
Titanium	ppm	<b>0</b>	<1	<1	0
Silver	ppm	<b>0</b>	0	<1	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	<1



### ADDITIVES

Calcium	ppm	<b>1572</b>	1527	2064	1853
Magnesium	ppm	<b>679</b>	1007	667	553
Zinc	ppm	<b>1274</b>	1469	1474	1292
Phosphorus	ppm	<b>1037</b>	1137	1175	1061
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>17</b>	6	17	32

### Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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:** 10657337  
**Signed:** Wes Davis  
**Report Date:** 21 Sep 2023



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## GRAPHS

