



# CONSTRUCTION EQUIPMENT

## VOLVO L90H 623578 - DIESEL ENGINE



**Sample No:** VCP422084

**Oil Type:** KENDALL SUPER-D XA 15W40

**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP422084</b>	VCP422467	VCP330294	VCP342270
Sample Date	<b>24 Jan 2024</b>	26 Apr 2023	08 Nov 2022	12 Mar 2022
Machine Hours	<b>21678</b>	20470	19759	18870
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

### OLDCASTLE LAWN AND GARDEN

2427 RWS RANCH RD  
DAVENPORT, FL  
US 33837

Contact: DAVID ORTIZ  
david.ortiz@oldcastle.com  
T: (800)833-2984  
F: (863)421-1776



### OIL CONDITION

Visc @ 100°C	cSt	<b>14.5</b>	15.6	14.7	15.5
Base Number (BN)	mg KOH/g	<b>8.4</b>	5.6	8.7	7.8
Oxidation (PA)	%	<b>54</b>	84	55	76



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.3</b>	1.1	0.4	0.9
Nitration (PA)	%	<b>48</b>	101	69	103
Sulfation (PA)	%	<b>50</b>	68	52	69
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	6	3	6
Sodium	ppm	<b>1</b>	3	1	2
Potassium	ppm	<b>2</b>	2	1	3



### WEAR METALS

Iron	ppm	<b>5</b>	21	6	20
Copper	ppm	<b>&lt;1</b>	0	<1	1
Lead	ppm	<b>0</b>	0	0	<1
Tin	ppm	<b>&lt;1</b>	0	0	<1
Aluminum	ppm	<b>4</b>	11	5	6
Chromium	ppm	<b>&lt;1</b>	<1	<1	1
Molybdenum	ppm	<b>30</b>	47	65	59
Nickel	ppm	<b>0</b>	0	<1	0
Titanium	ppm	<b>45</b>	56	6	24
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	<1	<1



### ADDITIVES

Calcium	ppm	<b>1430</b>	1916	1659	2214
Magnesium	ppm	<b>583</b>	667	626	287
Zinc	ppm	<b>1211</b>	1495	1348	1420
Phosphorus	ppm	<b>1010</b>	1143	1098	1207
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>108</b>	22	25	43

### 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:** GREDAVFL  
**Unique No:** 10884419  
**Signed:** Wes Davis  
**Report Date:** 19 Feb 2024



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## GRAPHS

