



# CONSTRUCTION EQUIPMENT

## 52227 IPUP VOLVO L90H 625311 - DIESEL ENGINE



**Sample No:** VCP442996  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 52227 IPUP



### SAMPLE INFORMATION

Sample Number	<b>VCP442996</b>	VCP428963	VCP379913	VCP375432
Sample Date	<b>17 May 2024</b>	12 Jan 2024	02 Feb 2023	11 Oct 2022
Machine Hours	<b>5559</b>	4914	3255	2672
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Not Changd
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

### VCES- VOLVO CONSTRUCTION EQUIPMENT

8594 FRUITRIDGE ROAD  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	13.4	13.7	13.6
Base Number (BN)	mg KOH/g	<b>6.9</b>	9.8	10.4	7.8
Oxidation (PA)	%	<b>59</b>	84	82	60

### 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>0.4</b>	0.8	0.7	0.3
Nitration (PA)	%	<b>78</b>	73	67	83
Sulfation (PA)	%	<b>53</b>	63	62	56
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>7</b>	6	6	5
Sodium	ppm	<b>2</b>	3	2	<1
Potassium	ppm	<b>2</b>	0	1	2



### WEAR METALS

Iron	ppm	<b>17</b>	15	20	20
Copper	ppm	<b>1</b>	1	<1	1
Lead	ppm	<b>&lt;1</b>	0	0	<1
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>19</b>	17	16	9
Chromium	ppm	<b>1</b>	1	1	1
Molybdenum	ppm	<b>44</b>	42	42	46
Nickel	ppm	<b>&lt;1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	<1	0	<1
Silver	ppm	<b>&lt;1</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1778</b>	1857	1716	1912
Magnesium	ppm	<b>516</b>	567	490	531
Zinc	ppm	<b>1151</b>	1262	1186	1314
Phosphorus	ppm	<b>1020</b>	1042	991	1084
Barium	ppm	<b>0</b>	0	<1	0
Boron	ppm	<b>22</b>	21	32	27

**Depot:** VOLVO4485  
**Unique No:** 11036746  
**Signed:** Wes Davis  
**Report Date:** 22 May 2024



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## GRAPHS

