



# CONSTRUCTION EQUIPMENT

SPM595106 VOLVO L90H 624199 - DIESEL ENGINE



**Sample No:** VCP354490  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SPM595106



## SAMPLE INFORMATION

Sample Number	<b>VCP354490</b>	VCP422174	VCP400985	VCP365860
Sample Date	<b>22 Aug 2023</b>	06 Jun 2023	28 Feb 2023	01 Nov 2022
Machine Hours	<b>9032</b>	9032	8356	7635
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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## OIL CONDITION

Visc @ 100°C	cSt	<b>14.4</b>	14.6	13.8	15.3
Base Number (BN)	mg KOH/g	<b>9.5</b>	9.2	9.2	11.3
Oxidation (PA)	%	<b>57</b>	61	59	57



## CONTAMINATION

Soot %	%	<b>0.3</b>	0.3	0.3	0.1
Nitration (PA)	%	<b>55</b>	62	63	43
Sulfation (PA)	%	<b>51</b>	52	52	52
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>3</b>	3	5	4
Sodium	ppm	<b>2</b>	2	1	<1
Potassium	ppm	<b>&lt;1</b>	0	0	1



## WEAR METALS

Iron	ppm	<b>5</b>	8	7	1
Copper	ppm	<b>2</b>	<1	1	<1
Lead	ppm	<b>0</b>	0	<1	<1
Tin	ppm	<b>0</b>	0	<1	<1
Aluminum	ppm	<b>1</b>	<1	<1	2
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>63</b>	64	61	58
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>0</b>	<1	<1	0
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	1	<1
Vanadium	ppm	<b>0</b>	<1	<1	<1



## ADDITIVES

Calcium	ppm	<b>1118</b>	1152	1105	1032
Magnesium	ppm	<b>1057</b>	1084	959	892
Zinc	ppm	<b>1384</b>	1333	1315	1195
Phosphorus	ppm	<b>1112</b>	1112	1015	991
Barium	ppm	<b>0</b>	0	0	2
Boron	ppm	<b>0</b>	0	<1	1

## 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:** UNICICIL  
**Unique No:** 10632411  
**Signed:** Wes Davis  
**Report Date:** 05 Sep 2023



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## GRAPHS

