



# CONSTRUCTION EQUIPMENT

SPM619898 VOLVO L90H 625106 - DIESEL ENGINE



**Sample No:** VCP413062  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SPM619898



## SAMPLE INFORMATION

Sample Number	<b>VCP413062</b>	VCP354499	VCP410965	VCP404384
Sample Date	<b>12 Oct 2023</b>	22 Aug 2023	18 Apr 2023	11 Jan 2023
Machine Hours	<b>5121</b>	4106	4020	3460
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>	14.1	13.8	13.8
Base Number (BN)	mg KOH/g	<b>9.5</b>	8.7	8.4	9.5
Oxidation (PA)	%	<b>59</b>	65	57	59

## CONTAMINATION

Soot %	%	<b>0.2</b>	0.4	0.2	0.3
Nitration (PA)	%	<b>50</b>	70	58	63
Sulfation (PA)	%	<b>51</b>	54	47	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>	4	3	4
Sodium	ppm	<b>2</b>	2	<1	<1
Potassium	ppm	<b>2</b>	3	<1	0

## WEAR METALS

Iron	ppm	<b>5</b>	11	8	9
Copper	ppm	<b>1</b>	2	1	1
Lead	ppm	<b>0</b>	<1	0	<1
Tin	ppm	<b>&lt;1</b>	<1	0	<1
Aluminum	ppm	<b>4</b>	4	4	5
Chromium	ppm	<b>&lt;1</b>	1	<1	<1
Molybdenum	ppm	<b>57</b>	66	64	61
Nickel	ppm	<b>&lt;1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	<1	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	0	0

## ADDITIVES

Calcium	ppm	<b>988</b>	1213	1150	1115
Magnesium	ppm	<b>930</b>	1131	1090	954
Zinc	ppm	<b>1191</b>	1479	1452	1268
Phosphorus	ppm	<b>1020</b>	1170	1131	1022
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>0</b>	0	0	0

## 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:** 10712806  
**Signed:** Wes Davis  
**Report Date:** 27 Oct 2023

**VOLVO** **GRAPHS**

