



# CONSTRUCTION EQUIPMENT

W07013042 VOLVO L90H 624937 - DIESEL ENGINE



**Sample No:** VCP414594  
**Oil Type:** MOBIL 15W40  
**Job No:** W07013042



## SAMPLE INFORMATION

Sample Number	<b>VCP414594</b>	VCP386286	VCP338501	VCP319636
Sample Date	<b>31 Aug 2023</b>	20 Jan 2023	11 Mar 2022	10 Dec 2021
Machine Hours	<b>4797</b>	3535	1683	1215
Oil Hours	<b>500</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	N/A
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	13.6	13.4	13.6
Base Number (BN)	mg KOH/g	<b>5.8</b>	6.8	11.8	9.7
Oxidation (PA)	%	<b>58</b>	53	86	70



## CONTAMINATION

Soot %	%	<b>0.7</b>	0.3	0.3	0.3
Nitration (PA)	%	<b>73</b>	63	62	68
Sulfation (PA)	%	<b>60</b>	53	65	57
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>11</b>	8	6	3
Sodium	ppm	<b>2</b>	2	<1	<1
Potassium	ppm	<b>2</b>	8	1	<1



## WEAR METALS

Iron	ppm	<b>33</b>	14	15	3
Copper	ppm	<b>2</b>	1	1	<1
Lead	ppm	<b>1</b>	2	0	<1
Tin	ppm	<b>1</b>	1	<1	0
Aluminum	ppm	<b>7</b>	6	6	0
Chromium	ppm	<b>2</b>	1	2	0
Molybdenum	ppm	<b>79</b>	70	37	28
Nickel	ppm	<b>1</b>	<1	0	0
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	0	0



## ADDITIVES

Calcium	ppm	<b>1627</b>	1397	1838	1992
Magnesium	ppm	<b>488</b>	364	544	139
Zinc	ppm	<b>1200</b>	1084	1198	779
Phosphorus	ppm	<b>1000</b>	854	970	686
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>63</b>	183	53	426

## 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:** VOLVO8882  
**Unique No:** 10646597  
**Signed:** Wes Davis  
**Report Date:** 15 Sep 2023



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## GRAPHS

