



# CONSTRUCTION EQUIPMENT

134652 IAA VOLVO L90G 617255 - DIESEL ENGINE



**Sample No:** VCP420737  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 134652 IAA



## SAMPLE INFORMATION

Sample Number	<b>VCP420737</b>	VCP385988	VCP219839	VCP23385
Sample Date	<b>09 Dec 2023</b>	23 Jan 2023	19 Jun 2020	31 Mar 2020
Machine Hours	<b>15379</b>	14776	11283	10951
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>13.1</b>	13.3	14.1	14.0
Base Number (BN)	mg KOH/g	<b>10.4</b>	9.2	---	---
Oxidation (PA)	%	<b>82</b>	81	61	106

## 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>0.2</b>	0.5	0.3	1
Nitration (PA)	%	<b>58</b>	76	79	114
Sulfation (PA)	%	<b>60</b>	56	57	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>	12	4	6
Sodium	ppm	<b>6</b>	6	2	4
Potassium	ppm	<b>2</b>	<1	3	4



## WEAR METALS

Iron	ppm	<b>31</b>	29	9	34
Copper	ppm	<b>&lt;1</b>	3	<1	2
Lead	ppm	<b>1</b>	0	0	1
Tin	ppm	<b>&lt;1</b>	<1	<1	0
Aluminum	ppm	<b>7</b>	8	2	7
Chromium	ppm	<b>&lt;1</b>	1	<1	1
Molybdenum	ppm	<b>40</b>	39	5	40
Nickel	ppm	<b>1</b>	0	0	<1
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>1721</b>	1552	1327	2096
Magnesium	ppm	<b>524</b>	508	675	545
Zinc	ppm	<b>1213</b>	1008	740	992
Phosphorus	ppm	<b>1002</b>	913	702	803
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>46</b>	37	54	16

**Depot:** VOLVO0053  
**Unique No:** 10964409  
**Signed:** Wes Davis  
**Report Date:** 05 Apr 2024

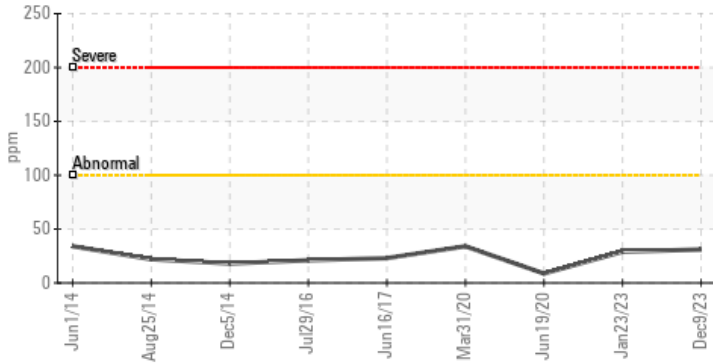


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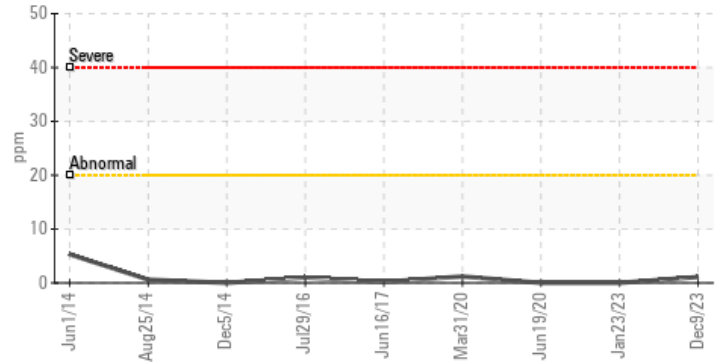


## GRAPHS

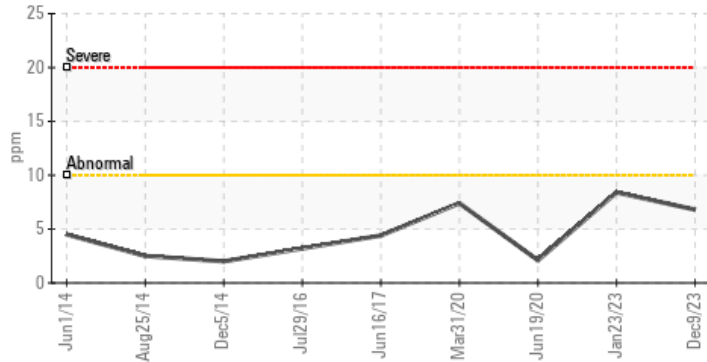
### Iron (ppm)



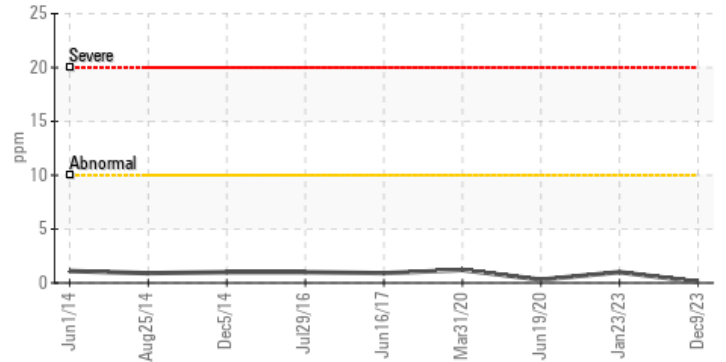
### Lead (ppm)



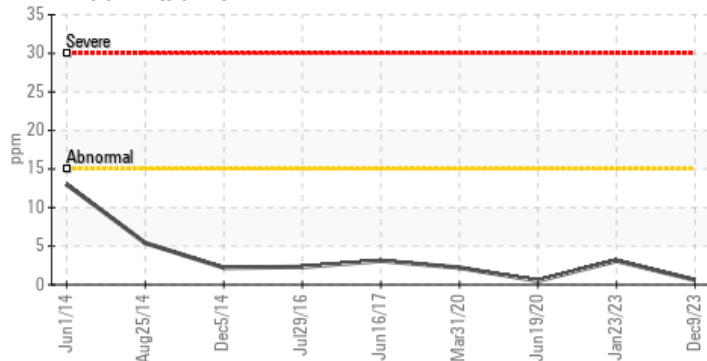
### Aluminum (ppm)



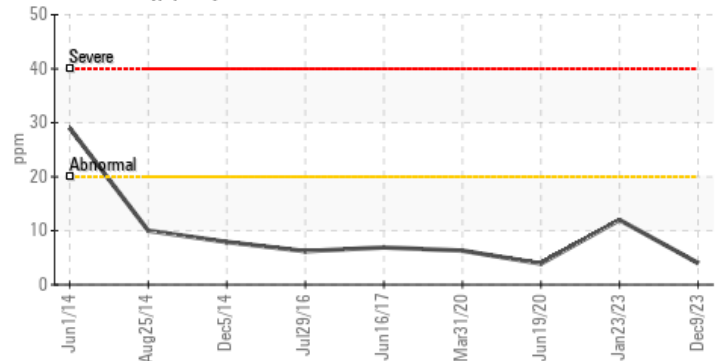
### Chromium (ppm)



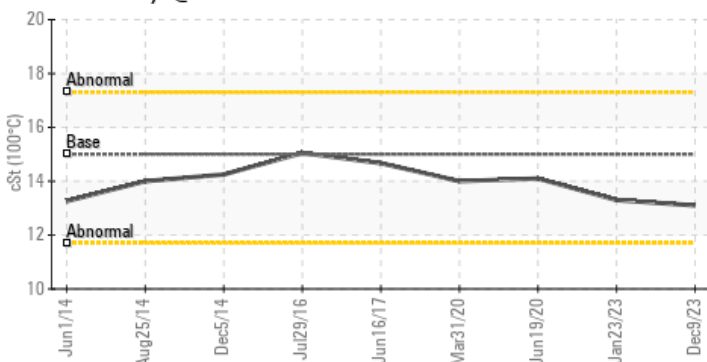
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

