



# CONSTRUCTION EQUIPMENT

6424189 VOLVO L90H 624974 - DIESEL ENGINE



**Sample No:** VCP323489  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 6424189



## SAMPLE INFORMATION

Sample Number	<b>VCP323489</b>	VCP308628	VCP305862	VCP295839
Sample Date	<b>18 Jun 2021</b>	21 Apr 2021	17 Feb 2021	23 Dec 2020
Machine Hours	<b>4127</b>	3763	3381	3041
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>13.3</b>	13.5	13.4	13.4
Oxidation (PA)	%	<b>81</b>	82	80	78



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.5</b>	0.5	0.4	0.4
Nitration (PA)	%	<b>58</b>	58	55	53
Sulfation (PA)	%	<b>66</b>	65	64	64
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	3	6	6
Sodium	ppm	<b>4</b>	3	2	3
Potassium	ppm	<b>&lt;1</b>	<1	0	4

## 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 condition of the oil is acceptable for the time in service.



## WEAR METALS

Iron	ppm	<b>8</b>	8	8	7
Copper	ppm	<b>&lt;1</b>	<1	<1	<1
Lead	ppm	<b>0</b>	0	0	3
Tin	ppm	<b>&lt;1</b>	<1	0	1
Aluminum	ppm	<b>2</b>	1	7	7
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>55</b>	43	42	40
Nickel	ppm	<b>&lt;1</b>	<1	1	1
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>1673</b>	1671	1789	1748
Magnesium	ppm	<b>512</b>	504	532	498
Zinc	ppm	<b>1077</b>	1056	1096	1122
Phosphorus	ppm	<b>930</b>	950	953	936
Barium	ppm	<b>0</b>	0	<1	0
Boron	ppm	<b>69</b>	45	44	47

**Depot:** VOLVO0090  
**Unique No:** 9554663  
**Signed:** Wes Davis  
**Report Date:** 23 Jun 2021

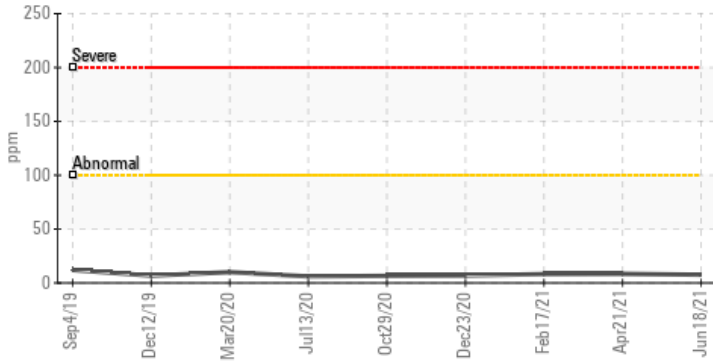


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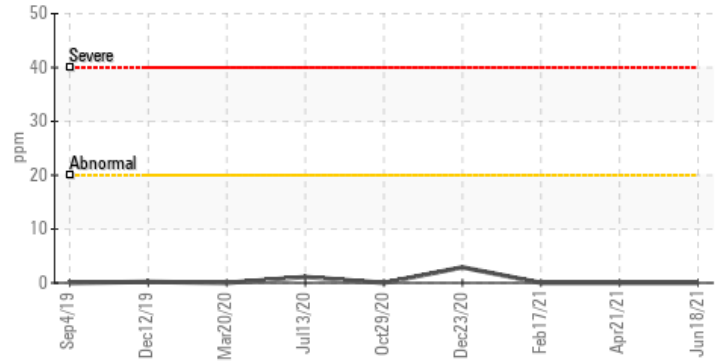


## GRAPHS

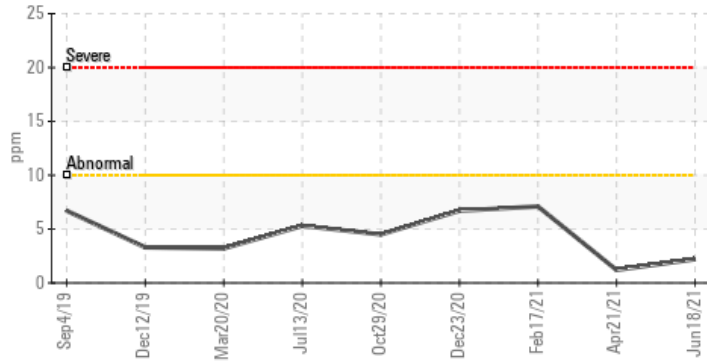
### Iron (ppm)



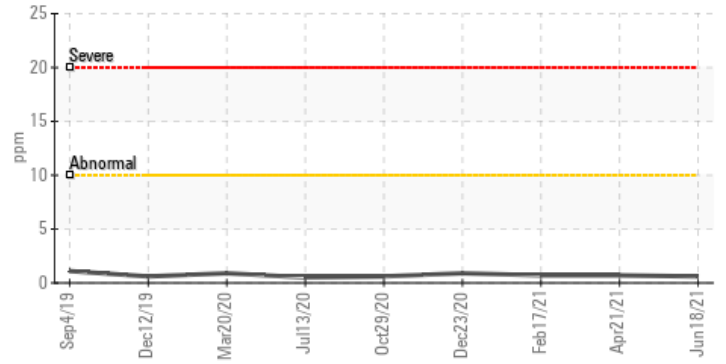
### Lead (ppm)



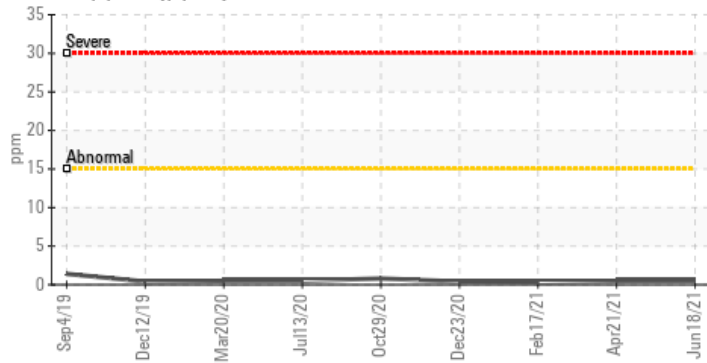
### Aluminum (ppm)



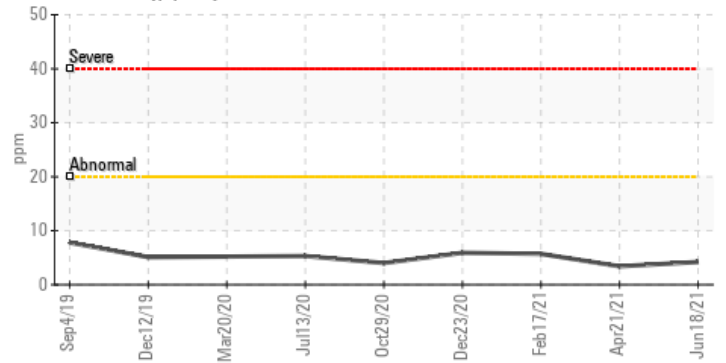
### Chromium (ppm)



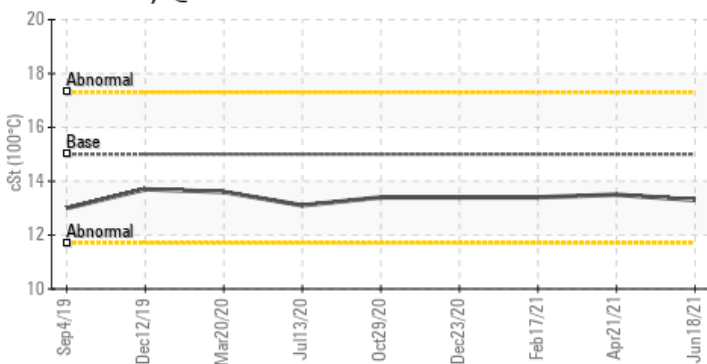
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Soot %

