



# CONSTRUCTION EQUIPMENT

SW-22500-2 VOLVO L70H 623673 - DIESEL ENGINE



**Sample No:** VCP423016  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW-22500-2



## SAMPLE INFORMATION

Sample Number	<b>VCP423016</b>	VCP419392	VCP395539	VCP353872
Sample Date	<b>10 Aug 2023</b>	31 May 2023	05 Jan 2023	17 Aug 2022
Machine Hours	<b>5162</b>	4633	4150	3358
Oil Hours	<b>530</b>	500	700	500
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>13.5</b>	14.0	13.8	13.6
Base Number (BN)	mg KOH/g	<b>9.9</b>	9.8	9.6	11.3
Oxidation (PA)	%	<b>60</b>	55	65	69



## CONTAMINATION

Soot %	%	<b>0.8</b>	0.6	1	0.9
Nitration (PA)	%	<b>59</b>	68	75	68
Sulfation (PA)	%	<b>56</b>	53	57	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	4	8	4
Sodium	ppm	<b>2</b>	1	2	0
Potassium	ppm	<b>1</b>	<1	0	1



## WEAR METALS

Iron	ppm	<b>10</b>	11	27	18
Copper	ppm	<b>1</b>	1	3	1
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>3</b>	3	8	6
Chromium	ppm	<b>1</b>	1	3	1
Molybdenum	ppm	<b>65</b>	64	62	56
Nickel	ppm	<b>0</b>	0	<1	0
Titanium	ppm	<b>&lt;1</b>	<1	0	0
Silver	ppm	<b>&lt;1</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>1165</b>	1131	1284	1199
Magnesium	ppm	<b>1038</b>	968	966	761
Zinc	ppm	<b>1305</b>	1224	1323	1174
Phosphorus	ppm	<b>1065</b>	983	1044	994
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>2</b>	11	5	11

## 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:** VOLVO8770  
**Unique No:** 10608035  
**Signed:** Sean Felton  
**Report Date:** 21 Aug 2023

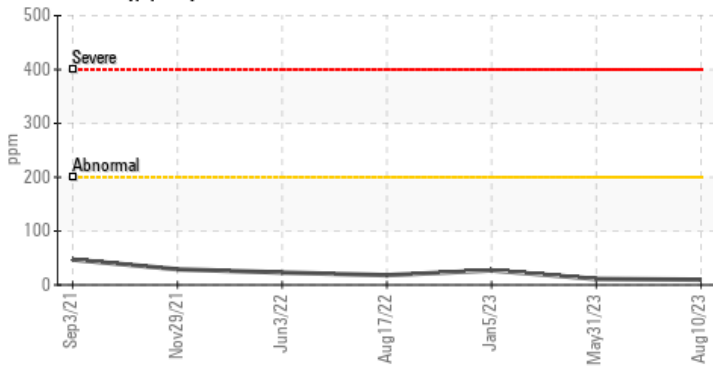


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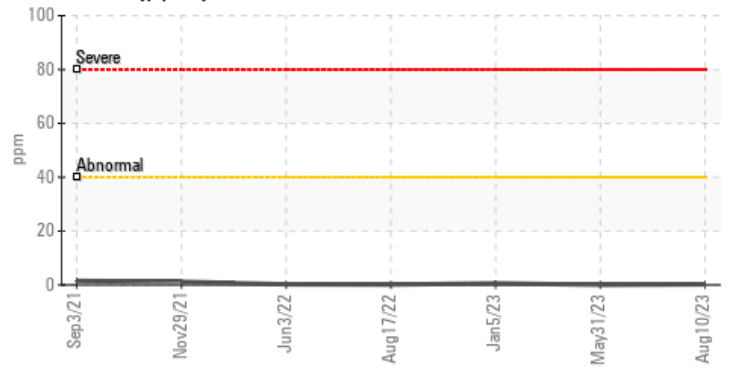


## GRAPHS

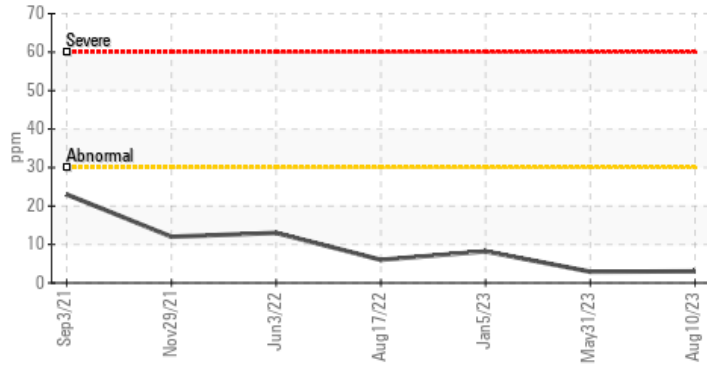
### Iron (ppm)



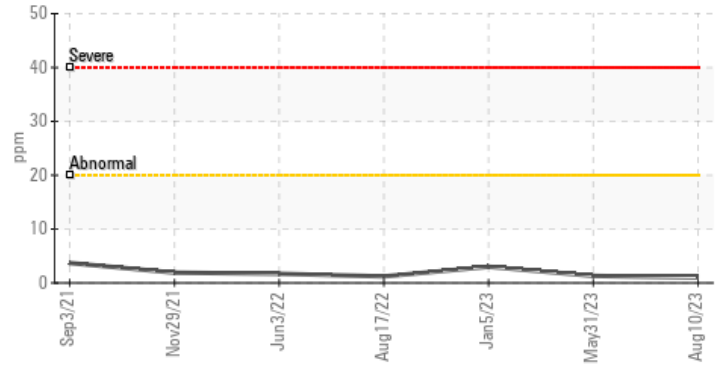
### Lead (ppm)



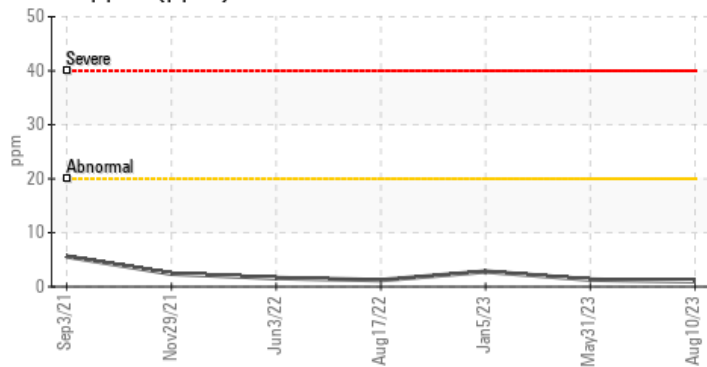
### Aluminum (ppm)



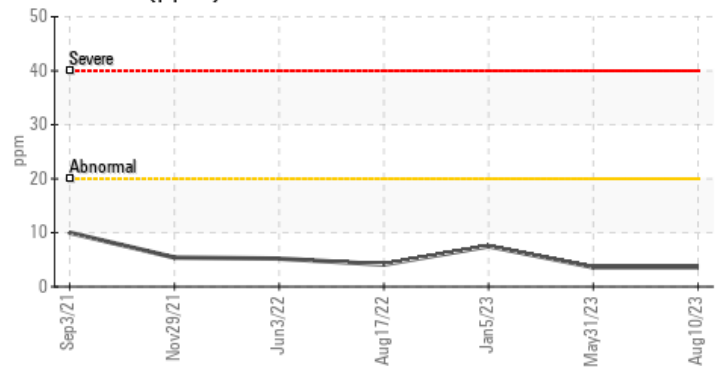
### Chromium (ppm)



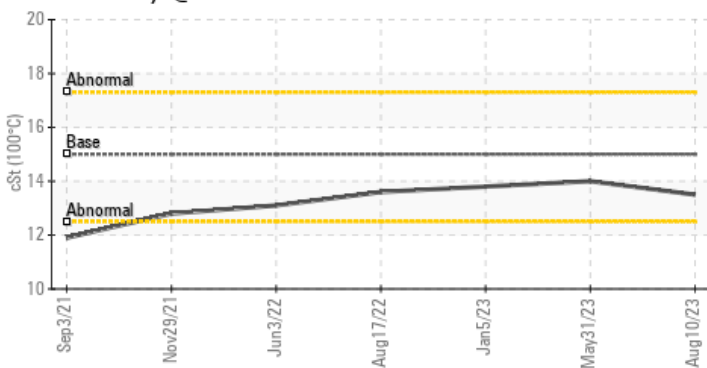
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

