



# CONSTRUCTION EQUIPMENT

W14797 VOLVO L110H 555 - DIESEL ENGINE



**Sample No:** VCP435133  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** W14797



## SAMPLE INFORMATION

Sample Number	<b>VCP435133</b>	VCP404656	VCP375316	VCP280360
Sample Date	<b>16 Oct 2023</b>	18 Jul 2023	01 Sep 2022	14 Jun 2022
Machine Hours	<b>3042</b>	2585	1024	588
Oil Hours	<b>500</b>	500	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	ABNORMAL

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## OIL CONDITION

Visc @ 100°C	cSt	█ <b>12.8</b>	█ 13.0	█ 12.7	▲ 10.8
Base Number (BN)	mg KOH/g	█ <b>9.3</b>	█ 9.3	█ 10.5	█ 5.8
Oxidation (PA)	%	<b>79</b>	85	89	58

## 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

Soot %	%	█ <b>0.1</b>	█ 0.2	█ 0.1	█ 0.1
Nitration (PA)	%	<b>55</b>	66	64	78
Sulfation (PA)	%	<b>59</b>	63	66	53
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	█ 0.9
Silicon	ppm	█ <b>8</b>	█ 10	█ 10	█ 33
Sodium	ppm	█ <b>2</b>	█ 3	█ 2	█ 3
Potassium	ppm	█ <b>&lt;1</b>	█ 1	█ 1	█ 3

## WEAR METALS

Iron	ppm	█ <b>7</b>	█ 9	█ 6	█ 13
Copper	ppm	█ <b>&lt;1</b>	█ 1	█ 20	▲ 156
Lead	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ 2
Tin	ppm	█ <b>&lt;1</b>	█ 1	█ 2	█ 4
Aluminum	ppm	█ <b>2</b>	█ 2	█ 2	█ 4
Chromium	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Molybdenum	ppm	█ <b>45</b>	█ 41	█ 45	█ 95
Nickel	ppm	█ <b>&lt;1</b>	█ <1	█ 0	█ <1
Titanium	ppm	<b>0</b>	<1	0	0
Silver	ppm	█ <b>0</b>	█ 0	0	<1
Manganese	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ 3
Vanadium	ppm	<b>0</b>	<1	0	0

## ADDITIVES

Calcium	ppm	█ <b>1816</b>	█ 1716	█ 1675	█ 2374
Magnesium	ppm	█ <b>561</b>	█ 530	█ 434	█ 13
Zinc	ppm	█ <b>1282</b>	█ 1026	█ 945	█ 1244
Phosphorus	ppm	█ <b>1174</b>	█ 836	█ 750	█ 1105
Barium	ppm	█ <b>0</b>	█ 0	█ 0	█ 0
Boron	ppm	█ <b>53</b>	█ 45	█ 40	█ 61

**Depot:** VOLVO0080  
**Unique No:** 10708830  
**Signed:** Wes Davis  
**Report Date:** 24 Oct 2023

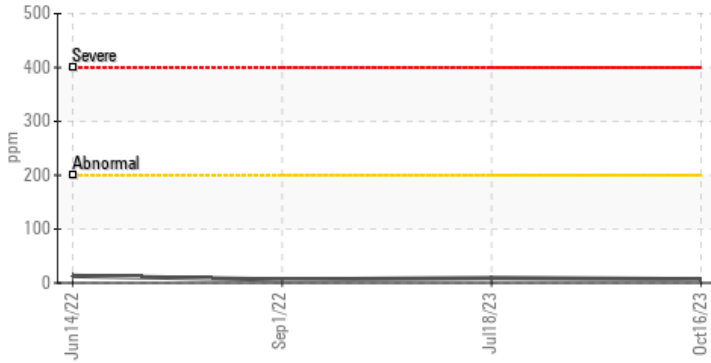


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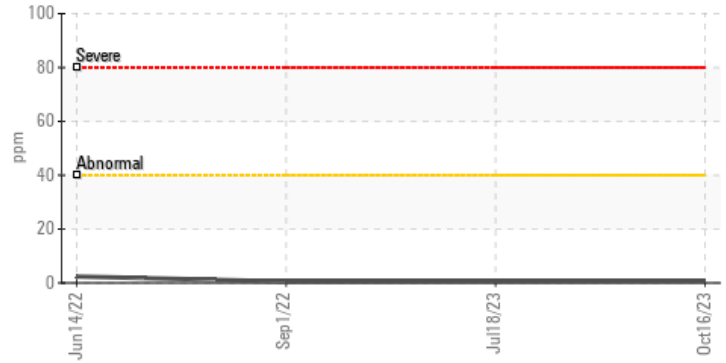


## GRAPHS

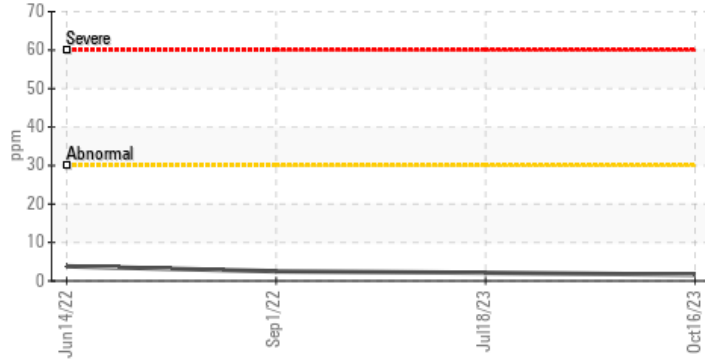
### Iron (ppm)



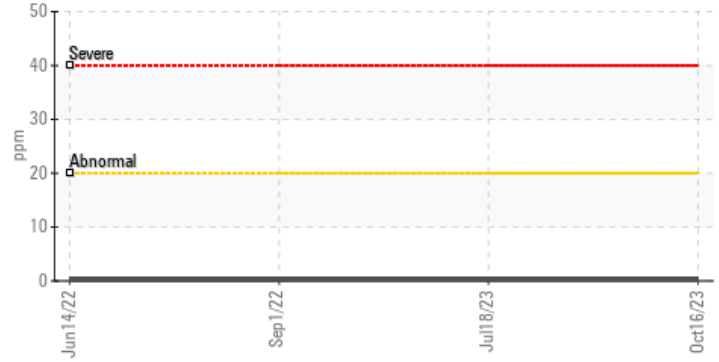
### Lead (ppm)



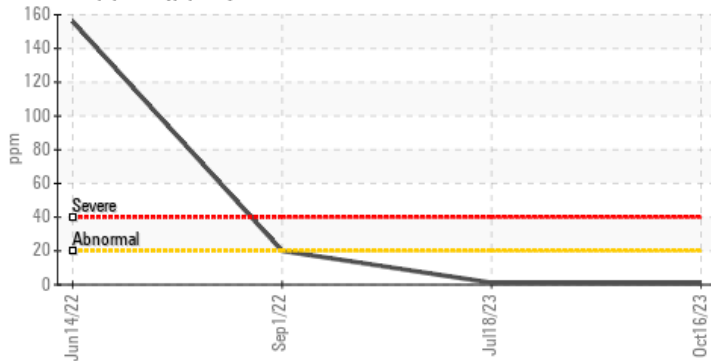
### Aluminum (ppm)



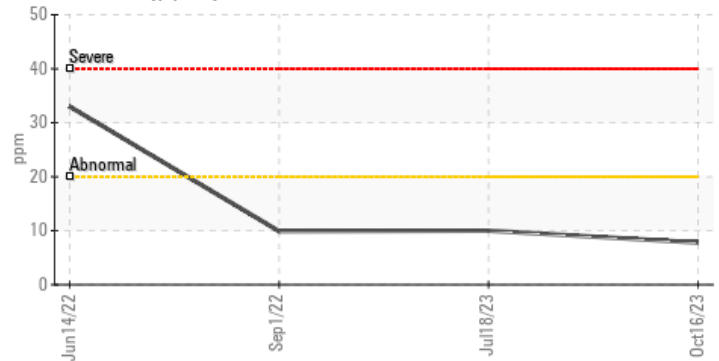
### Chromium (ppm)



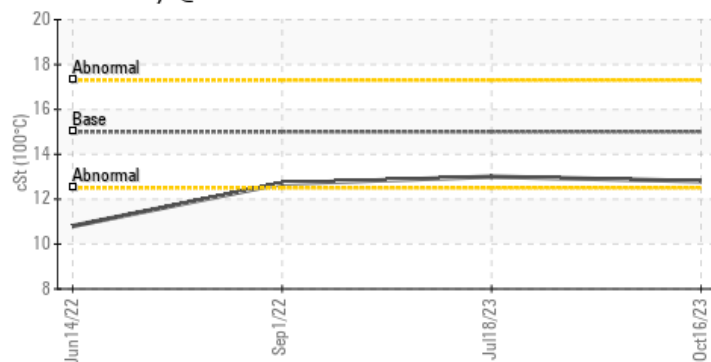
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

