



# CONSTRUCTION EQUIPMENT

W14312 VOLVO L110H 5555 - DIESEL ENGINE



**Sample No:** VCP404656  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** W14312



## SAMPLE INFORMATION

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

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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.0</b>	12.7	▲ 10.8	---
Base Number (BN)	mg KOH/g	<b>9.3</b>	10.5	5.8	---
Oxidation (PA)	%	<b>85</b>	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>0.2</b>	0.1	0.1	---
Nitration (PA)	%	<b>66</b>	64	78	---
Sulfation (PA)	%	<b>63</b>	66	53	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	0.9	---
Silicon	ppm	<b>10</b>	10	33	---
Sodium	ppm	<b>3</b>	2	3	---
Potassium	ppm	<b>1</b>	1	3	---



## WEAR METALS

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



## ADDITIVES

Calcium	ppm	<b>1716</b>	1675	2374	---
Magnesium	ppm	<b>530</b>	434	13	---
Zinc	ppm	<b>1026</b>	945	1244	---
Phosphorus	ppm	<b>836</b>	750	1105	---
Barium	ppm	<b>0</b>	0	0	---
Boron	ppm	<b>45</b>	40	61	---

**Depot:** VOLVO0080  
**Unique No:** 10573012  
**Signed:** Wes Davis  
**Report Date:** 26 Jul 2023

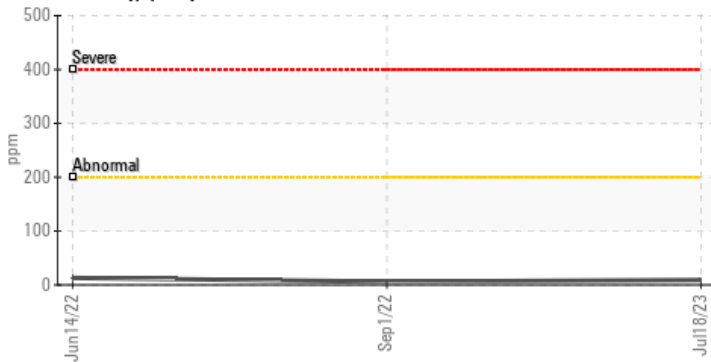


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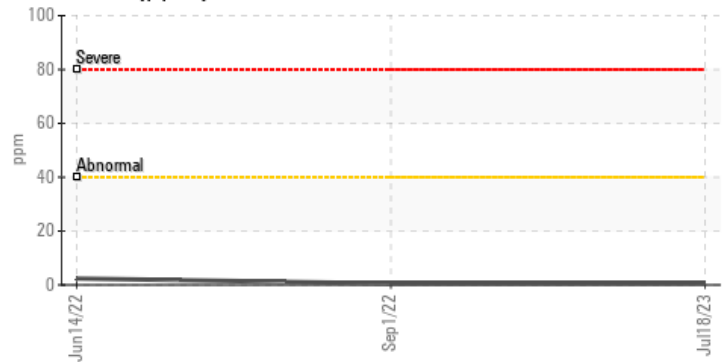


## GRAPHS

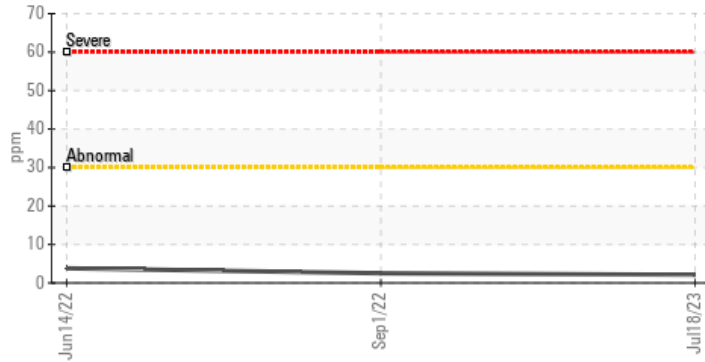
### Iron (ppm)



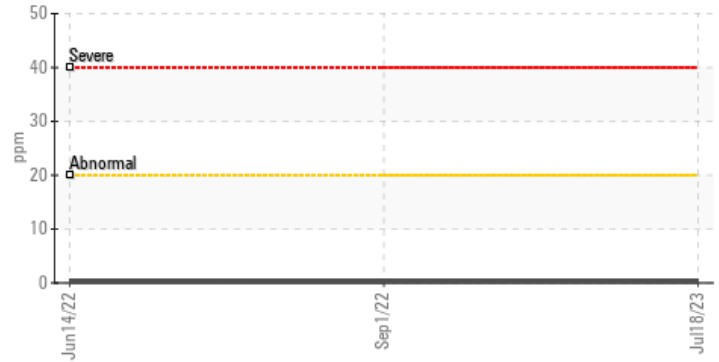
### Lead (ppm)



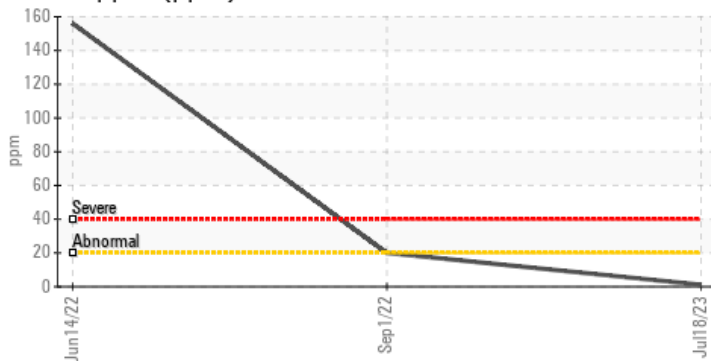
### Aluminum (ppm)



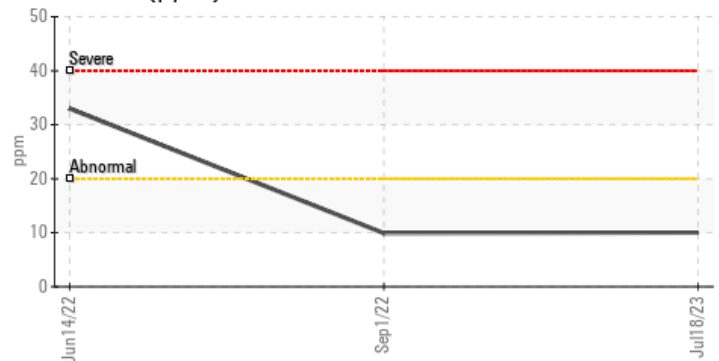
### Chromium (ppm)



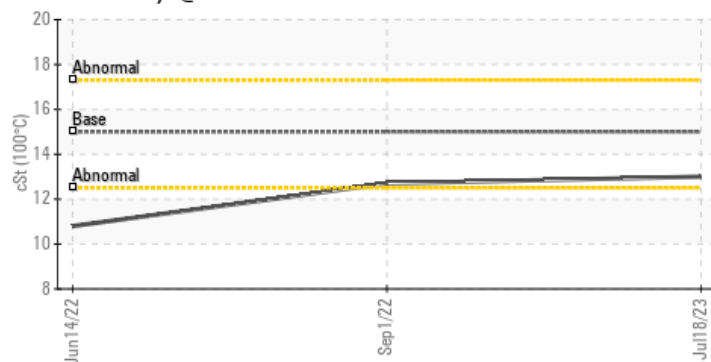
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

