



# CONSTRUCTION EQUIPMENT

SWA578899 VOLVO A30G 752316 - DIESEL ENGINE



**Sample No:** VCP454055  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWA578899



## SAMPLE INFORMATION

Sample Number	<b>VCP454055</b>	VCP379708	VCP330160	VCP356206
Sample Date	<b>06 Jun 2024</b>	29 Nov 2022	05 Apr 2022	05 Apr 2022
Machine Hours	<b>3946</b>	2557	1425	1425
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Not Chngd</b>	Changed	Changed	Changed
Sample Status	<b>SEVERE</b>	ABNORMAL	ABNORMAL	ABNORMAL

**ALTA EQUIPMENT COMPANY**  
 5210 REESE ROAD  
 DAVIE, FL  
 US 33314  
 Contact: N. FACEY  
 nfacey@altaequipfl.com  
 T: (954)581-4744  
 F: (954)583-0318

## OIL CONDITION

Visc @ 100°C	cSt	<b>11.7</b>	12.3	11.9	11.1
Base Number (BN)	mg KOH/g	<b>7.2</b>	9.2	8.4	4.7
Oxidation (PA)	%	<b>106</b>	70	67	113

## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.3</b>	0.3	0.2	0.7
Nitration (PA)	%	<b>84</b>	73	71	118
Sulfation (PA)	%	<b>62</b>	61	59	78
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>12</b>	4	7	24
Sodium	ppm	<b>2</b>	5	2	3
Potassium	ppm	<b>4</b>	0	1	5

## WEAR METALS

Iron	ppm	<b>45</b>	14	13	53
Copper	ppm	<b>31</b>	195	361	166
Lead	ppm	<b>3</b>	2	0	3
Tin	ppm	<b>4</b>	2	2	8
Aluminum	ppm	<b>78</b>	2	1	5
Chromium	ppm	<b>4</b>	<1	<1	2
Molybdenum	ppm	<b>68</b>	56	62	53
Nickel	ppm	<b>&lt;1</b>	<1	0	5
Titanium	ppm	<b>&lt;1</b>	0	0	<1
Silver	ppm	<b>&lt;1</b>	<1	<1	0
Manganese	ppm	<b>2</b>	<1	1	5
Vanadium	ppm	<b>&lt;1</b>	0	0	0

## ADDITIVES

Calcium	ppm	<b>1586</b>	1171	1390	1790
Magnesium	ppm	<b>533</b>	887	1009	539
Zinc	ppm	<b>1038</b>	1193	1484	1183
Phosphorus	ppm	<b>816</b>	954	1156	927
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>25</b>	4	13	13

## Diagnosis

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. The iron level is severe. The copper level has decreased, but is still abnormal. Blower/turbocharger and/or piston wear is indicated. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

**Depot:** VOLVO0095  
**Unique No:** 11073550  
**Signed:** Doug Bogart  
**Report Date:** 17 Jun 2024

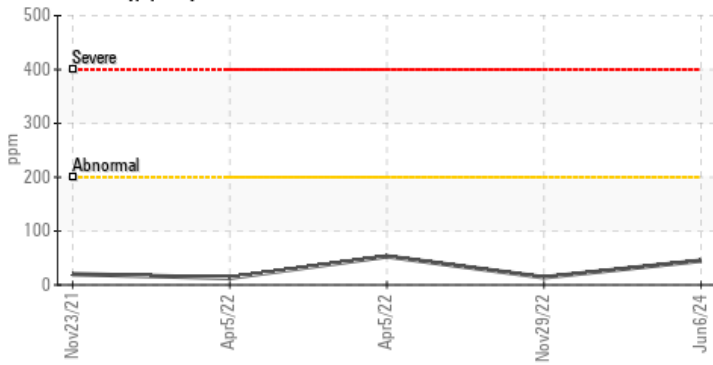


# CONSTRUCTION EQUIPMENT

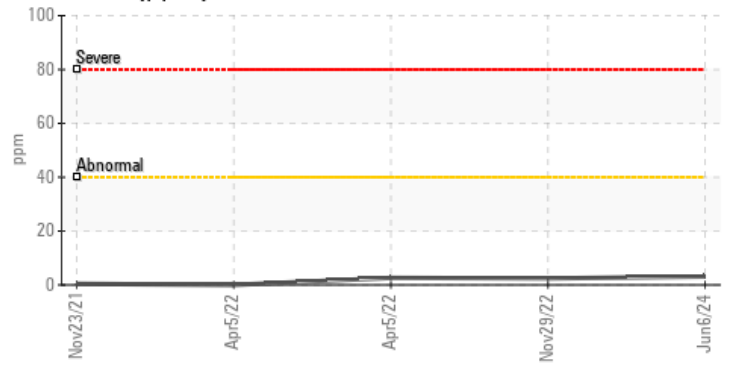


## GRAPHS

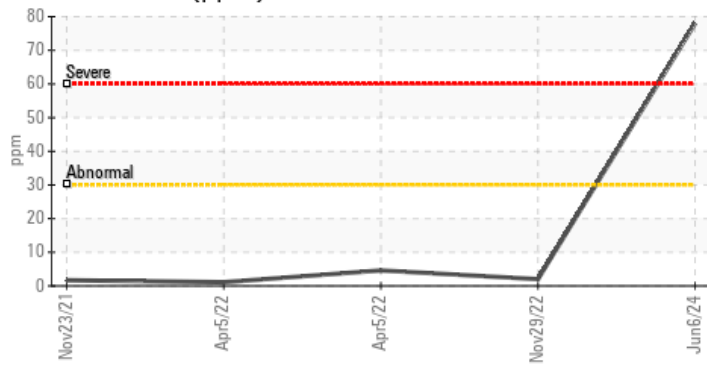
### Iron (ppm)



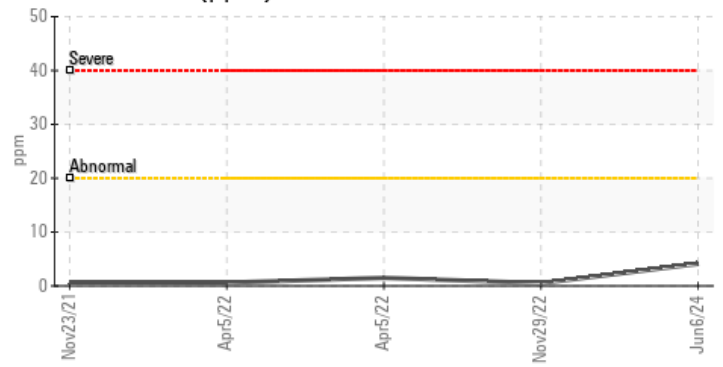
### Lead (ppm)



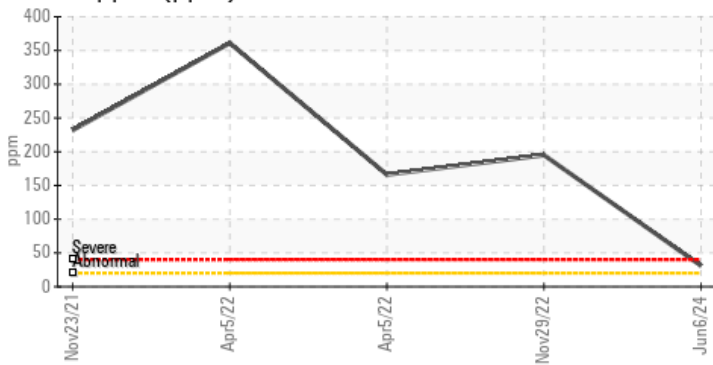
### Aluminum (ppm)



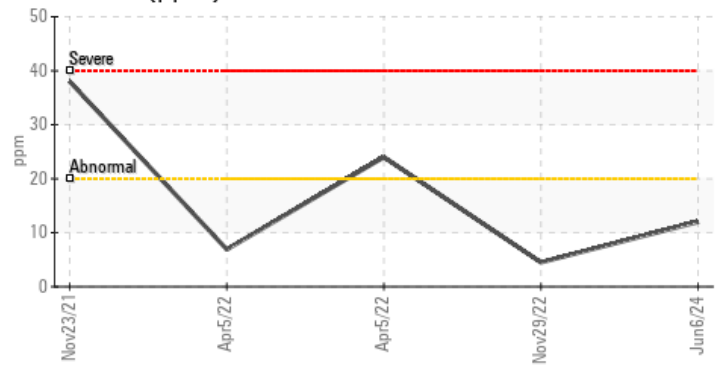
### Chromium (ppm)



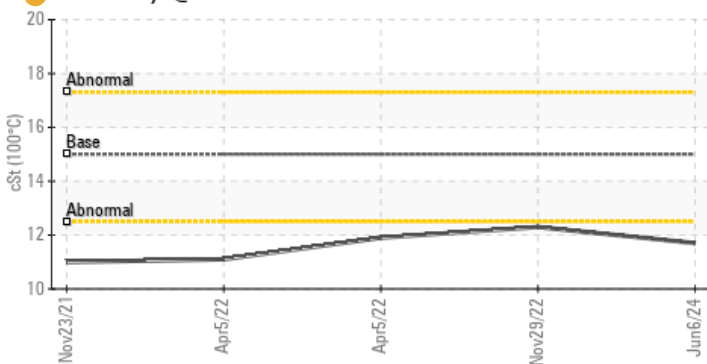
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

