



# CONSTRUCTION EQUIPMENT

## 511389 VOLVO L70H 622630 - DIESEL ENGINE



**Sample No:** VCP455294  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 511389



### SAMPLE INFORMATION

Sample Number	<b>VCP455294</b>	VCP435105	VCP417629	VCP421048
Sample Date	<b>19 Mar 2024</b>	15 Dec 2023	07 Jul 2023	16 May 2023
Machine Hours	<b>11764</b>	11214	10741	10311
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	N/A	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**WASTE MANAGEMENT**  
 4986 LB MCLEOD RD.  
 ORLANDO, FL  
 US 32811  
 Contact: SERVICE MANAGER

### OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	12.9	13.2	13.3
Base Number (BN)	mg KOH/g	<b>9.9</b>	10.3	10.0	9.9
Oxidation (PA)	%	<b>82</b>	82	85	85

T: (407)481-2530  
 F: (407)843-0614

### 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 acceptable for the time in service.

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.4</b>	0.3	0.2	0.2
Nitration (PA)	%	<b>65</b>	60	60	61
Sulfation (PA)	%	<b>59</b>	61	61	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>17</b>	16	15	11
Sodium	ppm	<b>2</b>	2	2	0
Potassium	ppm	<b>1</b>	2	<1	1

### WEAR METALS

Iron	ppm	<b>8</b>	5	6	7
Copper	ppm	<b>1</b>	<1	1	<1
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>12</b>	11	5	3
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>42</b>	42	43	46
Nickel	ppm	<b>&lt;1</b>	<1	0	<1
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	0	0

### ADDITIVES

Calcium	ppm	<b>1713</b>	1667	1844	1702
Magnesium	ppm	<b>495</b>	533	569	511
Zinc	ppm	<b>1128</b>	1172	1236	1135
Phosphorus	ppm	<b>956</b>	968	988	921
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>29</b>	30	30	29

**Depot:** WASORL  
**Unique No:** 10937607  
**Signed:** Don Baldrige  
**Report Date:** 22 Mar 2024

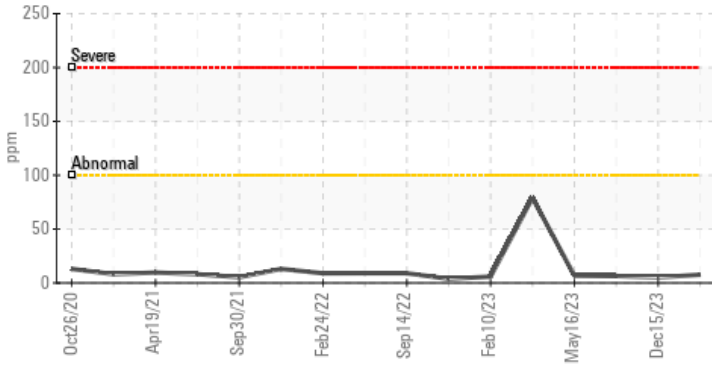


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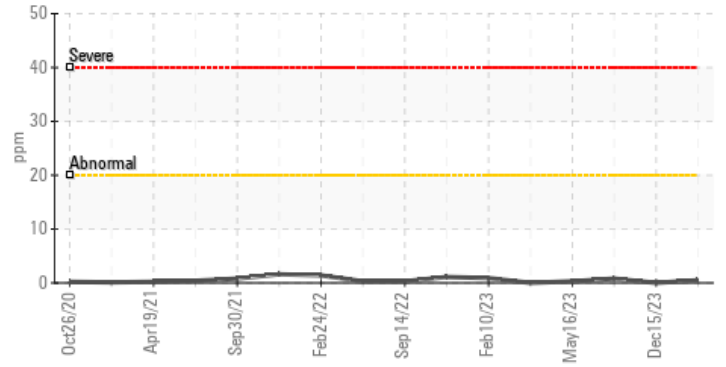


## GRAPHS

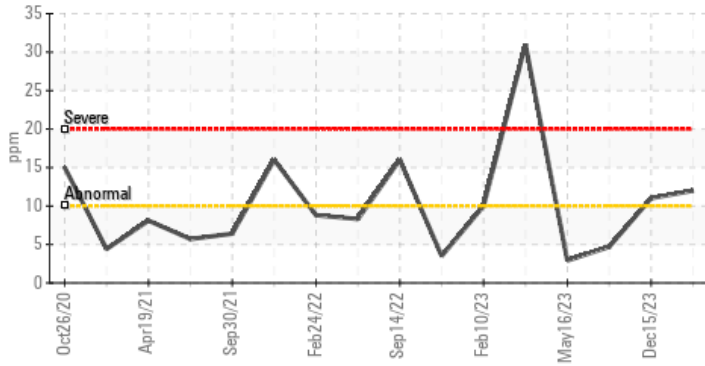
### Iron (ppm)



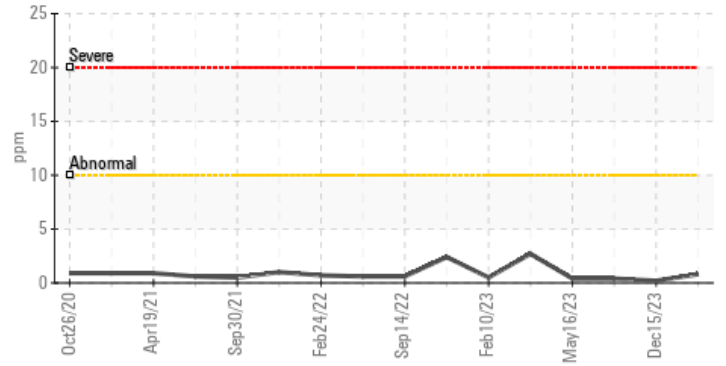
### Lead (ppm)



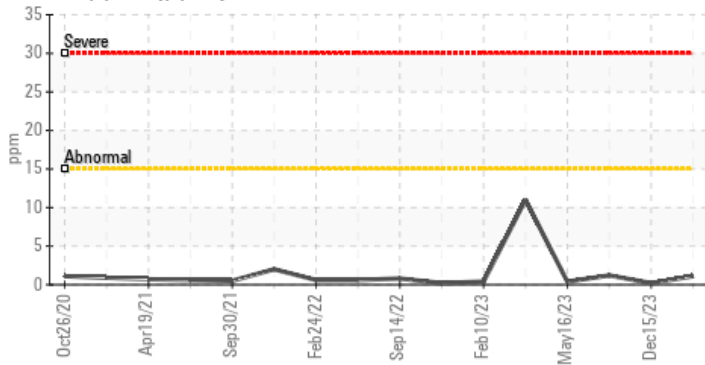
### Aluminum (ppm)



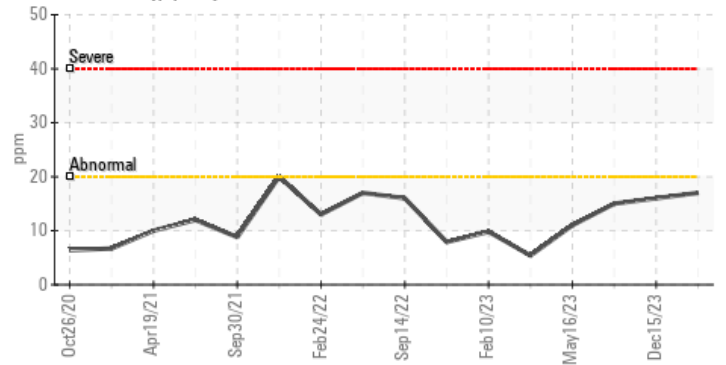
### Chromium (ppm)



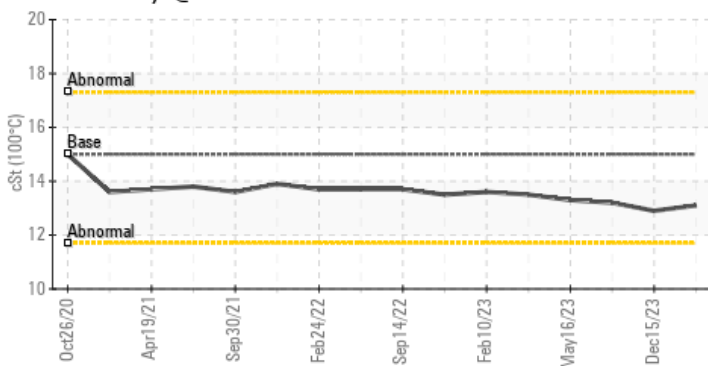
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

