## **CONSTRUCTION EQUIPMENT** SW-33181-2 MAVERICK VOLVO L220E 3527 - DIESEL ENGINE

Sample No: VCP446575 **Oil Type:** Job No:

VOLVO

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SW-33181-2 MAVERICK

## SAMPLE INFORMATION Sample Number VCP446575 VCP120433 Sample Date 16 Apr 2024 06 Feb 2014 Machine Hours 549 6059 **Oil Hours** 549 0 Oil Changed Changed N/A Sample Status ABNORMAL NORMAI **OIL CONDITION** Visc @ 100°C cSt 11.3 13.99 Base Number (BN) mg KOH/g 5.4 59 Oxidation (PA) % 40 CONTAMINATION % NEG NEG Water Soot % % 0.3 0.2 Nitration (PA) % 78 33 % 53 33 Sulfation (PA) Glycol % NEG NEG % < 1.0 Fuel 0.5 Silicon ppm 19 3 Sodium ppm 2 3 Potassium ppm 2 1 WEAR METALS 16 Iron ppm $\square 7$ 156 4 Copper ppm Lead ■<1 < 1</p> ppm Tin ppm 2 0 Aluminum 2 3 ppm □ <1 1 Chromium ppm Molybdenum 86 3 ppm Nickel 0 0 ppm Titanium 0 1 ppm 0 Silver 0 ppm Manganese 2 0 ppm Vanadium 0 <1 ppm

ADDITIVES					
Calcium	ppm	2242	3135		
Magnesium	ppm	26	131		
Zinc	ppm	1189	1290		
Phosphorus	ppm	993	1153		
Barium	ppm	0	0		
Boron	ppm	<b>4</b> 3	25		



**ARNOLD MACHINERY COMPANY** 

2975 WEST 2100 SOUTH SALT LAKE CITY, UT US 84119 Contact: TJ LARK tlark@arnoldmachinerv.com T: (801)972-4000 F: (801)975-9434

## Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

**VOLVO8770** Depot: Unique No: 10992771 Signed: Jonathan Hester **Report Date:** 25 Apr 2024

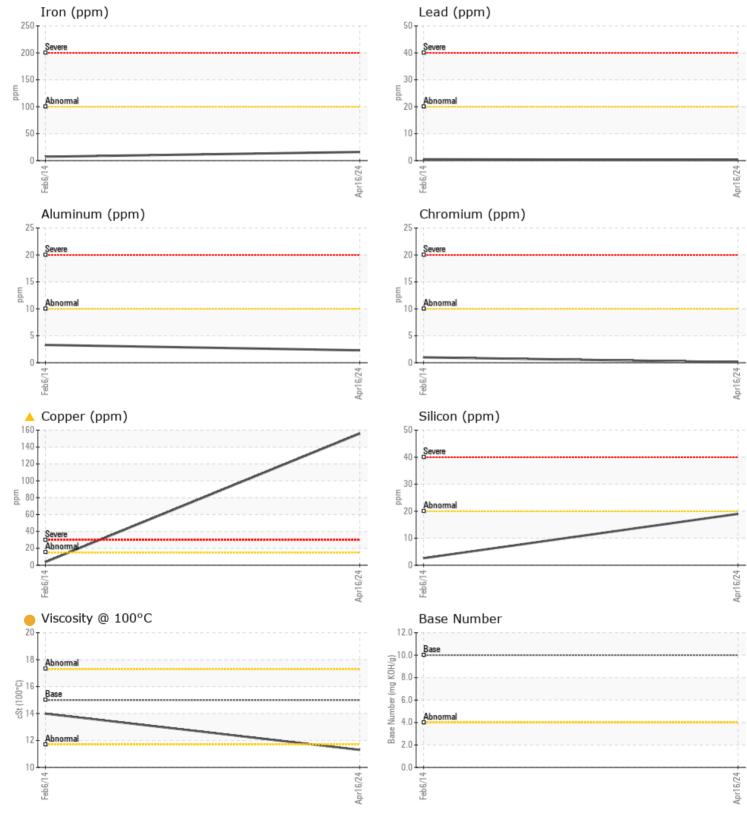
Contact/Location: TJ LARK - VOLVO8770

## **CONSTRUCTION EQUIPMENT**



GRAPHS

VOLVO



Report Id: VOLVO8770 [WUSCAR] 06157348 (Generated: 04/25/2024 11:18:46) Rev: 1

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