CONSTRUCTION EQUIPMENT
VOLVO L180H 5663 - DIESEL ENGINE

Sample No: VCP433510
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:

ALTA EQUIPMENT COMPANY
5151 DR MARTIN LUTHER KING BLVD
FORT MYERS, FL
US 33905
Contact: TODD LARK
tlark@altaequipfl.com
T:
F: (239)481-3302

SAMPLE INFORMATION

Sample Number		**VCP433510**	---	---	---
Sample Date		**09 Dec 2023**	---	---	---
Machine Hours		**1357**	---	---	---
Oil Hours		**0**	---	---	---
Oil Changed		**Changed**	---	---	---
Sample Status		**ABNORMAL**	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	▲ **11.0**	---	---	---
Base Number (BN)	mg KOH/g	▲ **4.1**	---	---	---
Oxidation (PA)	%	**69**	---	---	---

CONTAMINATION

Water	%	**NEG**	---	---	---
Soot %	%	■ **0.5**	---	---	---
Nitration (PA)	%	**83**	---	---	---
Sulfation (PA)	%	**67**	---	---	---
Glycol	%	**NEG**	---	---	---
Fuel	%	■ **0.6**	---	---	---
Silicon	ppm	▲ **20**	---	---	---
Sodium	ppm	■ **4**	---	---	---
Potassium	ppm	■ **7**	---	---	---

WEAR METALS

Iron	ppm	■ **24**	---	---	---
Copper	ppm	▲ **85**	---	---	---
Lead	ppm	■ **<1**	---	---	---
Tin	ppm	■ **3**	---	---	---
Aluminum	ppm	■ **3**	---	---	---
Chromium	ppm	■ **<1**	---	---	---
Molybdenum	ppm	■ **81**	---	---	---
Nickel	ppm	■ **1**	---	---	---
Titanium	ppm	**0**	---	---	---
Silver	ppm	■ **0**	---	---	---
Manganese	ppm	■ **3**	---	---	---
Vanadium	ppm	**0**	---	---	---

ADDITIVES

Calcium	ppm	■ **1985**	---	---	---
Magnesium	ppm	**122**	---	---	---
Zinc	ppm	■ **1191**	---	---	---
Phosphorus	ppm	■ **942**	---	---	---
Barium	ppm	■ **0**	---	---	---
Boron	ppm	■ **10**	---	---	---

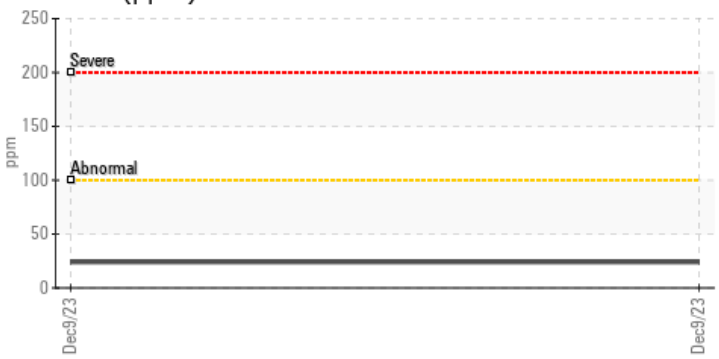
Diagnosis

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. All other component wear rates are normal. Fuel content negligible. Elemental level of silicon (Si) above normal The oil viscosity is lower than normal. The BN level is low. Confirm oil type.

Depot: VOLVO0090
Unique No: 10789214
Signed: Angela Borella
Report Date: 19 Dec 2023

GRAPHS

Iron (ppm)

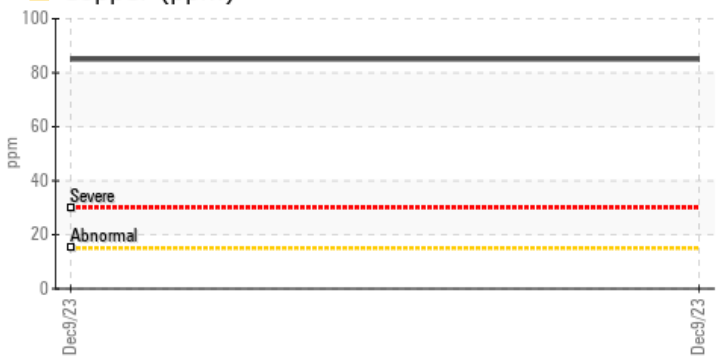


Lead (ppm)

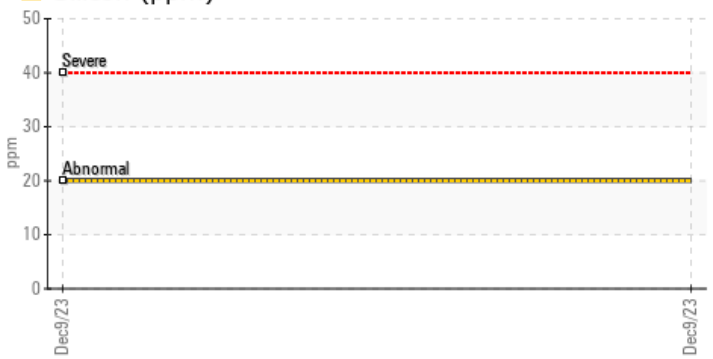
Aluminum (ppm)

Chromium (ppm)

▲ Copper (ppm)



▲ Silicon (ppm)



▲ Viscosity @ 100°C

▲ Base Number