



CONSTRUCTION EQUIPMENT

SW-35664-2 RAMSEY VOLVO A60H 350381 - DIESEL ENGINE



Sample No: VCP454290
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-35664-2 RAMSEY



SAMPLE INFORMATION

Sample Number	VCP454290	---	---	---
Sample Date	06 Jun 2024	---	---	---
Machine Hours	502	---	---	---
Oil Hours	502	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

ARNOLD MACHINERY COMPANY
 2975 WEST 2100 SOUTH
 SALT LAKE CITY, UT
 US 84119
 Contact: TONY PAYAN
 tpayan@arnoldmachinery.com
 T: (801)972-4000
 F: (801)975-9434



OIL CONDITION

Visc @ 100°C	cSt	● 11.1	---	---	---
Base Number (BN)	mg KOH/g	■ 5.4	---	---	---
Oxidation (PA)	%	65	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. 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.



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.9	---	---	---
Nitration (PA)	%	87	---	---	---
Sulfation (PA)	%	59	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.8	---	---	---
Silicon	ppm	■ 29	---	---	---
Sodium	ppm	■ 3	---	---	---
Potassium	ppm	■ 4	---	---	---



WEAR METALS

Iron	ppm	■ 40	---	---	---
Copper	ppm	■ 62	---	---	---
Lead	ppm	■ 2	---	---	---
Tin	ppm	■ 6	---	---	---
Aluminum	ppm	■ 4	---	---	---
Chromium	ppm	■ 2	---	---	---
Molybdenum	ppm	■ 93	---	---	---
Nickel	ppm	■ 4	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ <1	---	---	---
Manganese	ppm	■ 2	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	■ 2237	---	---	---
Magnesium	ppm	■ 28	---	---	---
Zinc	ppm	■ 1140	---	---	---
Phosphorus	ppm	■ 923	---	---	---
Barium	ppm	■ <1	---	---	---
Boron	ppm	■ 26	---	---	---

Depot: VOLVO8770
Unique No: 11085931
Signed: Don Baldrige
Report Date: 20 Jun 2024

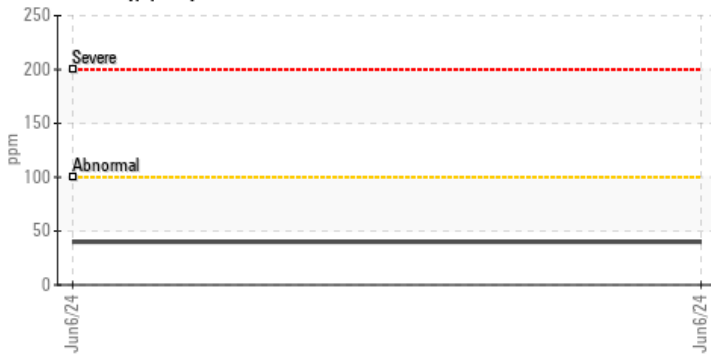


CONSTRUCTION EQUIPMENT



GRAPHS

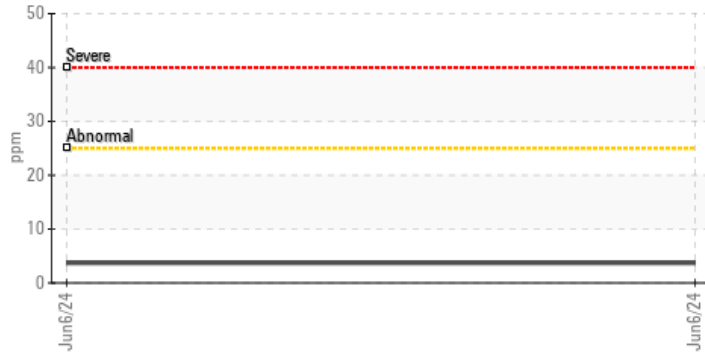
Iron (ppm)



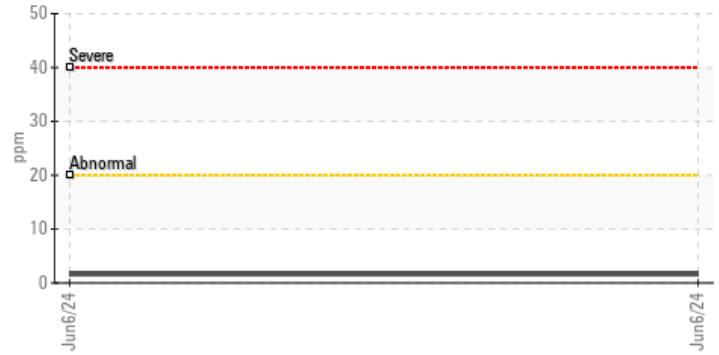
Lead (ppm)



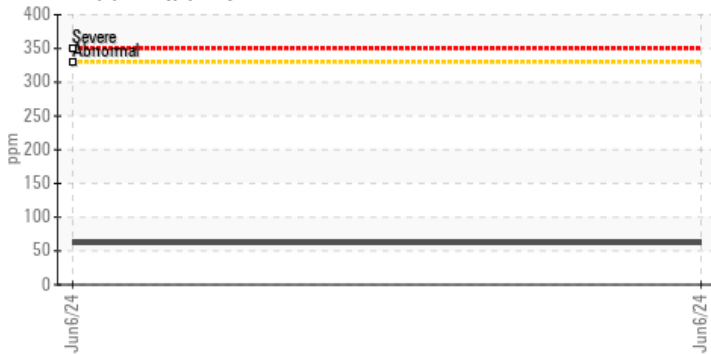
Aluminum (ppm)



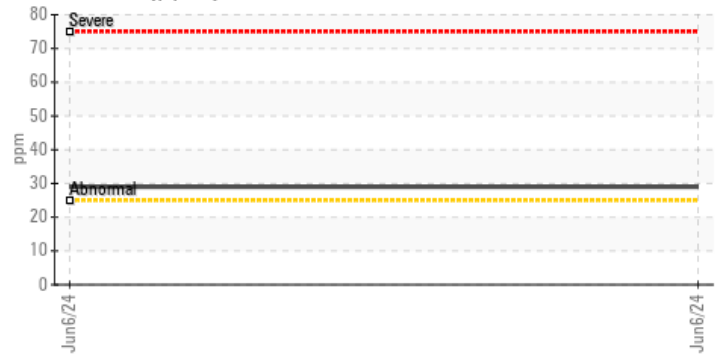
Chromium (ppm)



Copper (ppm)



Silicon (ppm)



● Viscosity @ 100°C



Base Number

