



CONSTRUCTION EQUIPMENT

566437 CADILLAC ASPH VOLVO L220H 3412 - DIESEL ENGINE



Sample No: VCP414113
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 566437 CADILLAC ASPH



SAMPLE INFORMATION

Sample Number	VCP414113	VCP380528	VCP388736	---
Sample Date	29 Jun 2023	05 Dec 2022	06 Sep 2022	---
Machine Hours	1586	1077	554	---
Oil Hours	500	1077	554	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	---

ALTA EQUIPMENT COMPANY - METRO WEST
 56195 PONTIAC TRAIL
 NEW HUDSON, MI
 US 48165
 Contact: PAUL CONZ
 paul.conz@altg.com
 T: (313)348-8861
 F: (248)356-2029



OIL CONDITION

Visc @ 100°C	cSt	█ 13.4	▲ 11.1	▲ 11.1	---
Base Number (BN)	mg KOH/g	█ 7.5	█ 6.1	█ 7.5	---
Oxidation (PA)	%	65	72	69	---



CONTAMINATION

Soot %	%	█ 0.3	█ 0.4	█ 0.2	---
Nitration (PA)	%	63	90	83	---
Sulfation (PA)	%	57	69	59	---
Glycol	%	NEG	█ 0.0	NEG	---
Fuel	%	<1.0	<1.0	█ 0.7	---
Silicon	ppm	█ 8	█ 29	█ 30	---
Sodium	ppm	█ 2	█ 0	█ 8	---
Potassium	ppm	█ <1	█ 2	█ 5	---



WEAR METALS

Iron	ppm	█ 9	█ 15	█ 11	---
Copper	ppm	▲ 149	▲ 306	▲ 325	---
Lead	ppm	█ 2	█ 1	█ 6	---
Tin	ppm	█ 1	█ <1	█ 2	---
Aluminum	ppm	█ <1	█ 2	█ 1	---
Chromium	ppm	█ <1	█ <1	█ <1	---
Molybdenum	ppm	█ 59	█ 84	█ 81	---
Nickel	ppm	█ <1	█ 0	█ <1	---
Titanium	ppm	<1	0	<1	---
Silver	ppm	█ 0	█ 0	0	---
Manganese	ppm	█ <1	█ 3	█ 3	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	█ 1133	█ 2228	█ 2250	---
Magnesium	ppm	█ 809	76	28	---
Zinc	ppm	█ 1145	█ 1189	█ 1252	---
Phosphorus	ppm	█ 933	█ 964	█ 979	---
Barium	ppm	█ 0	█ 0	█ <1	---
Boron	ppm	█ 0	█ 25	█ 53	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level has decreased, but is still abnormal. All other 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 suitable for further service.

Depot: VOLVO2990
Unique No: 10549130
Signed: Don Baldrige
Report Date: 11 Jul 2023



CONSTRUCTION EQUIPMENT



GRAPHS

