



CONSTRUCTION EQUIPMENT

607997 MOSAIC VOLVO A45G 342286 - DIESEL ENGINE



Sample No: VCP414729
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 607997 MOSAIC



SAMPLE INFORMATION

Sample Number	VCP414729	VCP411587	VCP409309	VCP388195
Sample Date	29 Sep 2023	05 Jun 2023	15 Feb 2023	21 Oct 2022
Machine Hours	7665	7102	6453	5893
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	N/A	Not Changd
Sample Status	ATTENTION	ATTENTION	NORMAL	NORMAL

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC
 8418 PALM RIVER ROAD
 TAMPA, FL
 US 33619
 Contact: JOHN FARDELLA
 john.fardella@altg.com
 T: (813)630-0077
 F: (813)630-2233



OIL CONDITION

Visc @ 100°C	cSt	▲ 12.3	▲ 11.7	■ 12.6	■ 13.2
Base Number (BN)	mg KOH/g	■ 9.8	■ 9.2	■ 9.9	■ 11.3
Oxidation (PA)	%	78	84	80	89



CONTAMINATION

Soot %	%	■ 0.2	■ 0.1	■ 0.2	■ 0.4
Nitration (PA)	%	58	71	61	73
Sulfation (PA)	%	59	61	61	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	■ 0.6	<1.0	<1.0
Silicon	ppm	■ 4	■ 4	■ 4	■ 4
Sodium	ppm	■ 2	■ 2	■ 2	■ 3
Potassium	ppm	■ <1	■ <1	■ <1	■ 0

Diagnosis

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



WEAR METALS

Iron	ppm	■ 2	■ 4	■ 5	■ 7
Copper	ppm	■ 1	■ 2	■ 1	■ 2
Lead	ppm	■ 1	■ 1	■ <1	■ 2
Tin	ppm	■ 1	■ <1	■ <1	■ <1
Aluminum	ppm	■ 2	■ 2	■ 1	■ 2
Chromium	ppm	■ <1	■ 0	■ <1	■ <1
Molybdenum	ppm	■ 42	■ 45	■ 44	■ 39
Nickel	ppm	■ <1	■ <1	■ 0	■ <1
Titanium	ppm	0	<1	0	<1
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	■ 1697	■ 1623	■ 1616	■ 1657
Magnesium	ppm	■ 504	■ 473	■ 488	■ 479
Zinc	ppm	■ 1217	■ 1015	■ 1101	■ 1078
Phosphorus	ppm	■ 976	■ 826	■ 914	■ 907
Barium	ppm	■ 0	■ 0	■ 0	■ 8
Boron	ppm	■ 35	■ 24	■ 40	■ 23

Depot: VOLVO0093
Unique No: 10708817
Signed: Don Baldrige
Report Date: 25 Oct 2023



CONSTRUCTION EQUIPMENT



GRAPHS

