



CONSTRUCTION EQUIPMENT

W05003765 VOLVO A40F 11613 - DIESEL ENGINE



Sample No: VCP420895
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W05003765



SAMPLE INFORMATION

Sample Number	VCP420895	VCP384502	VCP249760	VCP220076
Sample Date	03 Aug 2023	08 Jun 2023	25 Apr 2019	30 Jan 2019
Machine Hours	14546	14229	10931	0
Oil Hours	500	250	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.8	12.6	12.7	13.4
Base Number (BN)	mg KOH/g	8.5	8.7	---	---
Oxidation (PA)	%	59	58	63	55

CONTAMINATION

Soot %	%	0.5	0.7	0.2	0.3
Nitration (PA)	%	56	50	52	60
Sulfation (PA)	%	59	53	53	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	4	4	5
Sodium	ppm	2	2	2	8
Potassium	ppm	0	2	0	0

Diagnosis

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

WEAR METALS

Iron	ppm	12	6	3	3
Copper	ppm	1	<1	<1	<1
Lead	ppm	0	0	<1	<1
Tin	ppm	0	<1	0	0
Aluminum	ppm	1	2	2	3
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	116	56	53	63
Nickel	ppm	0	<1	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0

ADDITIVES

Calcium	ppm	1631	1740	1609	1886
Magnesium	ppm	633	536	474	84
Zinc	ppm	932	1248	1012	1038
Phosphorus	ppm	785	1032	930	848
Barium	ppm	0	0	0	0
Boron	ppm	284	72	45	72

Depot: VOLVO0002
Unique No: 10609104
Signed: Sean Felton
Report Date: 22 Aug 2023



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GRAPHS

