



CONSTRUCTION EQUIPMENT

W05004000 VOLVO A40F 11613 - DIESEL ENGINE



Sample No: VCP189745
Oil Type: MOBIL 15W40
Job No: W05004000



SAMPLE INFORMATION

Sample Number	VCP189745	VCP413806	VCP418326	VCP420895
Sample Date	08 Jan 2024	27 Nov 2023	11 Oct 2023	03 Aug 2023
Machine Hours	15341	15059	14811	14546
Oil Hours	250	250	250	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.8	12.5	12.9	12.8
Base Number (BN)	mg KOH/g	9.1	9.3	9.0	8.5
Oxidation (PA)	%	64	66	63	59

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.3	0.2	0.3	0.5
Nitration (PA)	%	56	51	53	56
Sulfation (PA)	%	61	60	63	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	5	6	6
Sodium	ppm	1	0	2	2
Potassium	ppm	<1	1	<1	0



WEAR METALS

Iron	ppm	<1	5	7	12
Copper	ppm	0	<1	<1	1
Lead	ppm	<1	0	<1	0
Tin	ppm	0	0	<1	0
Aluminum	ppm	2	3	4	1
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	104	91	117	116
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	<1	<1



ADDITIVES

Calcium	ppm	1444	1510	1429	1631
Magnesium	ppm	631	541	598	633
Zinc	ppm	871	933	793	932
Phosphorus	ppm	697	761	650	785
Barium	ppm	0	2	4	0
Boron	ppm	256	247	373	284

Depot: VOLVO0002
Unique No: 10823584
Signed: Sean Felton
Report Date: 12 Jan 2024



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VOLVO GRAPHS

