



CONSTRUCTION EQUIPMENT

3022 VOLVO EC380EL 311273 - DIESEL ENGINE



Sample No: VCP432795
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 3022



SAMPLE INFORMATION

Sample Number	VCP432795	VCP383152	VCP374365	VCP379124
Sample Date	25 Mar 2024	14 Sep 2023	06 Feb 2023	10 Aug 2022
Machine Hours	6130	6600	5125	4625
Oil Hours	0	0	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.2	12.4	12.6	13.0
Base Number (BN)	mg KOH/g	9.5	9.2	9.9	11.1
Oxidation (PA)	%	84	80	82	92

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 %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	66	60	65	67
Sulfation (PA)	%	61	58	60	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	6	7	5
Sodium	ppm	2	5	2	3
Potassium	ppm	0	1	0	2

WEAR METALS

Iron	ppm	3	4	4	4
Copper	ppm	<1	2	<1	2
Lead	ppm	0	0	<1	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	40	43	38	40
Nickel	ppm	0	0	<1	<1
Titanium	ppm	<1	0	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	0	1	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	1757	1748	1566	1642
Magnesium	ppm	509	533	478	495
Zinc	ppm	1126	1142	1032	1089
Phosphorus	ppm	934	971	843	875
Barium	ppm	0	0	0	0
Boron	ppm	43	49	44	61

Depot: LEOMAD
Unique No: 10963156
Signed: Wes Davis
Report Date: 05 Apr 2024



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GRAPHS

