



CONSTRUCTION EQUIPMENT

VOLVO ECR58D 210557 - DIESEL ENGINE



Sample No: VCP398240
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP398240	VCP382891	VCP373544	VCP357335
Sample Date	09 Jan 2024	22 Jun 2023	14 Nov 2022	15 Apr 2022
Machine Hours	4425	3985	3545	2975
Oil Hours	500	500	0	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ATTENTION	NORMAL	NORMAL

LEONARDS CONTRACTING
 30850 STEPHENSON HWY
 MADISON HEIGHTS, MI
 US 48071
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OIL CONDITION

Visc @ 100°C	cSt	█ 12.9	▲ 11.4	█ 13.4	█ 13.2
Base Number (BN)	mg KOH/g	█ 9.8	█ 9.3	█ 11.4	█ 11.2
Oxidation (PA)	%	87	91	97	97

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	█ 0.2	█ 0.2	█ 0.2
Nitration (PA)	%	68	68	88	79
Sulfation (PA)	%	62	63	67	68
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	█ 1.1	<1.0	<1.0
Silicon	ppm	█ 5	█ 6	█ 4	█ 7
Sodium	ppm	█ 0	█ 2	█ 0	█ 2
Potassium	ppm	█ 0	█ <1	█ 1	█ <1



WEAR METALS

Iron	ppm	█ 4	█ 9	█ 12	█ 13
Copper	ppm	█ 0	█ <1	█ 1	█ <1
Lead	ppm	█ <1	█ <1	█ 0	█ <1
Tin	ppm	█ <1	█ <1	█ <1	█ <1
Aluminum	ppm	█ 2	█ <1	█ 2	█ 2
Chromium	ppm	█ <1	█ <1	█ <1	█ <1
Molybdenum	ppm	█ 40	█ 38	█ 52	█ 40
Nickel	ppm	█ <1	█ 0	█ 0	█ <1
Titanium	ppm	0	0	0	0
Silver	ppm	█ 0	█ 0	█ <1	<1
Manganese	ppm	█ <1	█ <1	█ <1	█ <1
Vanadium	ppm	0	0	0	<1



ADDITIVES

Calcium	ppm	█ 1678	█ 1717	█ 1858	█ 1838
Magnesium	ppm	█ 525	█ 516	█ 521	█ 561
Zinc	ppm	█ 1143	█ 1195	█ 1153	█ 1177
Phosphorus	ppm	█ 965	█ 933	█ 958	█ 1002
Barium	ppm	█ 0	█ 0	█ 0	█ 0
Boron	ppm	█ 46	█ 49	█ 42	█ 52

Depot: LEOMAD
Unique No: 10846872
Signed: Wes Davis
Report Date: 25 Jan 2024



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GRAPHS

