



CONSTRUCTION EQUIPMENT

247875 VOLVO EC220E 3 10188 - DIESEL ENGINE



Sample No: VCP272833
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 247875



SAMPLE INFORMATION

Sample Number	VCP272833	VCP260691	VCP260482	VCP250019
Sample Date	24 Jun 2020	30 Mar 2020	17 Dec 2019	09 Sep 2019
Machine Hours	4554	4011	3515	2989
Oil Hours	500	0	0	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.1	13.7	14.0	14.1
Oxidation (PA)	%	78	57	70	69



CONTAMINATION

Soot %	%	0	0	0.1	0
Nitration (PA)	%	59	61	60	61
Sulfation (PA)	%	75	64	68	64
Glycol	%	NEG	NEG	0.0	0.0
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	4	3	3
Sodium	ppm	2	2	<1	<1
Potassium	ppm	<1	2	7	8

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 condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	3	3	6	6
Copper	ppm	<1	<1	<1	<1
Lead	ppm	0	0	0	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	2	1	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	35	15	9	6
Nickel	ppm	<1	0	<1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	<1	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1624	1463	2096	2208
Magnesium	ppm	531	659	120	73
Zinc	ppm	890	829	1081	1142
Phosphorus	ppm	774	737	935	968
Barium	ppm	<1	3	0	<1
Boron	ppm	54	80	142	143

Depot: VOLVO3909
Unique No: 5069014
Signed: Wes Davis
Report Date: 25 Jun 2020



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GRAPHS

