

[[8000231988]] VOLVO EC300DL 210165 - DIESEL ENGINE

Sample No: VCP252076

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VCP252076	WC252072	VCE116460	VCP242697
Sample Date	18 Feb 2020	05 Feb 2020	09 Sep 2019	19 Apr 2019
Machine Hours	0	9984	9538	8795
Oil Hours	0	0	500	0
Oil Changed	Not Chngd	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.2	13.2	15.9	14.2
Base Number (BN)	mg KOH/g	---	9.42	---	---
Oxidation (PA)	%	78	80	97	98

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.

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0.2	1.6	0.6
Nitration (PA)	%	49	63	97	86
Sulfation (PA)	%	71	72	80	70
Glycol	%	NEG	0.0	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	10	21	6	7
Sodium	ppm	2	9	21	11
Potassium	ppm	4	25	1	<1

WEAR METALS

Iron	ppm	11	39	39	24
Copper	ppm	2	15	2	2
Lead	ppm	<1	2	<1	<1
Tin	ppm	<1	2	1	<1
Aluminum	ppm	2	6	4	4
Chromium	ppm	<1	3	1	1
Molybdenum	ppm	41	41	39	41
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	2	<1	<1
Vanadium	ppm	0	<1	<1	0

ADDITIVES

Calcium	ppm	1676	1956	1883	1782
Magnesium	ppm	505	456	476	492
Zinc	ppm	885	942	991	925
Phosphorus	ppm	778	807	811	769
Barium	ppm	<1	<1	<1	0
Boron	ppm	65	81	33	38

Depot: ENV180FRE
Unique No: 5006926
Signed: Wes Davis
Report Date: 24 Feb 2020

Contact/Location: Jim Barnet - ENV180FRE

12:40:44 Rev: 1

GRAPHS

