



CONSTRUCTION EQUIPMENT

600118 CRC VOLVO EC160E 310147 - DIESEL ENGINE



Sample No: VCP379883
Oil Type: CASTROL 15W40
Job No: 600118 CRC



SAMPLE INFORMATION

Sample Number	VCP379883	VCP346235	VCP371480	VCP363390
Sample Date	26 Apr 2023	31 Mar 2023	09 Jan 2023	11 Oct 2022
Machine Hours	9553	0	10533	10021
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	Changed	N/A
Sample Status	ABNORMAL	ABNORMAL	ATTENTION	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.0	13.6	14.1	14.0
Base Number (BN)	mg KOH/g	10.1	7.2	7.8	9.6
Oxidation (PA)	%	76	50	49	90

CONTAMINATION

Soot %	%	0.2	0.4	0.4	0.6
Nitration (PA)	%	60	75	73	92
Sulfation (PA)	%	59	57	52	68
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	11	19	13	30
Sodium	ppm	187	365	94	145
Potassium	ppm	2	6	8	4

Diagnosis

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels remain high. The BN result indicates that there is suitable alkalinity remaining in the oil.

WEAR METALS

Iron	ppm	7	13	9	20
Copper	ppm	1	2	1	2
Lead	ppm	<1	<1	1	<1
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	<1	7	10	12
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	37	14	12	36
Nickel	ppm	0	<1	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	<1	0

ADDITIVES

Calcium	ppm	1829	2118	1530	1967
Magnesium	ppm	488	243	220	426
Zinc	ppm	1161	1158	925	1216
Phosphorus	ppm	936	916	726	958
Barium	ppm	0	0	0	2
Boron	ppm	27	6	8	24

Depot: VOLVO1271
Unique No: 10661533
Signed: Jonathan Hester
Report Date: 27 Sep 2023



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VOLVO GRAPHS

