



CONSTRUCTION EQUIPMENT

SW30447 VOLVO EC480EL 311118 - DIESEL ENGINE



Sample No: VCP439629
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW30447



SAMPLE INFORMATION

Sample Number	VCP439629	VCP307074	VCP306117	VCP226547
Sample Date	22 Feb 2024	26 Mar 2021	15 Feb 2021	19 Dec 2018
Machine Hours	638	3279	3186	343
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	ABNORMAL

ARNOLD MACHINERY COMPANY
 4323 EAST WINSLOW AVENUE
 PHOENIX, AZ
 US 85040
 Contact: KEITH FELL
 kfell@arnoldmachinery.com
 T: (602)414-1900
 F: (602)414-1904



OIL CONDITION

Visc @ 100°C	cSt	12.8	10.5	13.3	12.83
Base Number (BN)	mg KOH/g	7.6	---	---	---
Oxidation (PA)	%	73	82	76	66



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.2	0.1
Nitration (PA)	%	75	54	84	52
Sulfation (PA)	%	57	65	58	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	0.7	5.8	<1.0	<1.0
Silicon	ppm	11	8	5	19
Sodium	ppm	4	2	1	4
Potassium	ppm	1	0	0	11



WEAR METALS

Iron	ppm	7	4	5	10
Copper	ppm	7	1	3	326
Lead	ppm	<1	<1	0	0
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	4	<1	1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	228	40	48	11
Nickel	ppm	<1	0	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	<1	<1	0
Manganese	ppm	<1	<1	<1	2
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1082	1516	1326	2330
Magnesium	ppm	943	490	750	94
Zinc	ppm	1194	1038	921	1108
Phosphorus	ppm	1075	888	754	879
Barium	ppm	0	0	0	0
Boron	ppm	8	61	5	8

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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 acceptable for the time in service.

Depot: VOLVO6174
Unique No: 10903920
Signed: Sean Felton
Report Date: 05 Mar 2024



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GRAPHS

