



CONSTRUCTION EQUIPMENT

SWA345090-10 VOLVO EC480E 314874 - DIESEL ENGINE



Sample No: VCP434893
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40
Job No: SWA345090-10



SAMPLE INFORMATION

Sample Number	VCP434893	VCP420285	VCP376200	VCP365478
Sample Date	20 Aug 2023	12 May 2023	26 Oct 2022	17 Aug 2022
Machine Hours	2955	2303	1335	900
Oil Hours	0	1000	435	900
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	ABNORMAL

CALLANAN
 RT 32 677 FLATBUSH RD
 EAST KINGSTON, NY
 US 12401
 Contact:



OIL CONDITION

Visc @ 100°C	cSt	12.8	12.95	▲ 12.4	▲ 10.6
Base Number (BN)	mg KOH/g	7.7	6.2	9.4	5.2
Oxidation (PA)	%	92	94	95	85

T:
F:

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

Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	93	95	87	104
Sulfation (PA)	%	64	68	70	70
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	0.5
Silicon	ppm	12	11	10	21
Sodium	ppm	4	2	3	4
Potassium	ppm	<1	1	0	2



WEAR METALS

Iron	ppm	15	18	10	15
Copper	ppm	10	22	▲ 101	▲ 172
Lead	ppm	0	0	1	2
Tin	ppm	2	2	1	3
Aluminum	ppm	2	2	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	44	37	50	79
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	1	1	1	3
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1811	1794	1915	1935
Magnesium	ppm	605	488	455	216
Zinc	ppm	1259	1146	1138	1143
Phosphorus	ppm	1000	870	948	916
Barium	ppm	0	0	0	1
Boron	ppm	12	11	20	8

Depot: CALEAS
Unique No: 10632459
Signed: Wes Davis
Report Date: 06 Sep 2023



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GRAPHS

