



CONSTRUCTION EQUIPMENT

SWO-070832 EPIROC T45-10SF TMG18SEDO183 - DIESEL ENGINE



Sample No: VCP436296
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SWO-070832



SAMPLE INFORMATION

Sample Number	VCP436296	VCP445721	VCP428983	VCP424718
Sample Date	01 Apr 2024	13 Nov 2023	31 Aug 2023	02 May 2023
Machine Hours	6670	6283	5911	5181
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	SEVERE	MARGINAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.5	▲ 7.5	■ 12.2	■ 13.7
Base Number (BN)	mg KOH/g	■ 10.0	■ 7.2	■ 9.9	■ 8.7
Oxidation (PA)	%	80	66	82	86

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. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.2	■ 0.2	■ 0.4	■ 0.5
Nitration (PA)	%	61	70	83	85
Sulfation (PA)	%	60	52	60	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	▲ 4.9	▲ 25.0	▲ 3.5	<1.0
Silicon	ppm	■ 6	■ 6	■ 7	■ 8
Sodium	ppm	■ 2	■ 2	■ 3	■ 2
Potassium	ppm	■ 2	■ 0	■ 2	■ <1



WEAR METALS

Iron	ppm	■ 16	■ 5	■ 10	■ 19
Copper	ppm	■ 1	■ <1	■ 3	■ 32
Lead	ppm	■ <1	■ 2	■ 3	■ 2
Tin	ppm	■ <1	■ <1	■ <1	■ <1
Aluminum	ppm	■ 4	■ 2	■ 3	■ 4
Chromium	ppm	■ 1	■ <1	■ <1	■ <1
Molybdenum	ppm	■ 41	■ 32	■ 48	■ 53
Nickel	ppm	■ <1	■ <1	■ 0	■ 0
Titanium	ppm	<1	0	0	<1
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ <1	■ <1	■ 1	■ <1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	■ 1551	1072	■ 1647	■ 1787
Magnesium	ppm	■ 483	■ 458	706	714
Zinc	ppm	■ 1031	■ 846	■ 1317	■ 1225
Phosphorus	ppm	■ 851	690	■ 996	■ 1004
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 47	■ 15	■ 19	■ 20

Depot: WHIGUN
Unique No: 10963046
Signed: Wes Davis
Report Date: 08 Apr 2024



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VOLVO GRAPHS

