



CONSTRUCTION EQUIPMENT

717425 5378 VOLVO L180H 5378 - DIESEL ENGINE



Sample No: VCP454765
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 717425



SAMPLE INFORMATION

Sample Number	VCP454765	DJJ022718	VCP433340	VCP312211
Sample Date	05 Jun 2024	05 Apr 2024	22 Nov 2023	03 May 2021
Machine Hours	8050	7610	6747	626
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	SEVERE

TRADEMARK METALS RECYCLING - EVERGLADES
 3440 NW 135TH ST
 OPA LOCKA, FL
 US 33054
 Contact: RYAN BOWDEN

OIL CONDITION

Visc @ 100°C	cSt	13.1	13.5	13.3	11.2
Base Number (BN)	mg KOH/g	9.3	8.2	8.1	---
Oxidation (PA)	%	56	61	61	96

T:
 F: (305)681-4914

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other 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

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.2	0.1
Nitration (PA)	%	52	62	63	63
Sulfation (PA)	%	52	53	53	70
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	0.2	39.1
Silicon	ppm	4	2	3	21
Sodium	ppm	2	0	2	3
Potassium	ppm	2	<1	2	6

WEAR METALS

Iron	ppm	10	4	7	21
Copper	ppm	30	2	3	391
Lead	ppm	<1	<1	0	1
Tin	ppm	<1	0	0	3
Aluminum	ppm	3	<1	2	1
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	73	58	62	41
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	0	4
Vanadium	ppm	<1	<1	0	0

ADDITIVES

Calcium	ppm	1236	1095	1073	1568
Magnesium	ppm	1165	1008	993	450
Zinc	ppm	1443	1293	1282	1124
Phosphorus	ppm	1153	1050	1012	949
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	48

Depot: TRAOPA
Unique No: 11073551
Signed: Sean Felton
Report Date: 13 Jun 2024



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GRAPHS

