



CONSTRUCTION EQUIPMENT

SWA350886-10 VOLVO L90H 623485 - DIESEL ENGINE



Sample No: VCP432339
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40
Job No: SWA350886-10



SAMPLE INFORMATION

Sample Number	VCP432339	VCP363801	VCP323573	VCP276023
Sample Date	13 Sep 2023	29 Aug 2022	14 Jul 2021	30 Oct 2020
Machine Hours	9867	8077	7138	6128
Oil Hours	0	0	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL



ULSTER COUNTY RESOURCE RECOVERY AGENCY
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OIL CONDITION

Visc @ 100°C	cSt	14.2	13.5	13.9	14.2
Base Number (BN)	mg KOH/g	10.1	11.6	---	---
Oxidation (PA)	%	84	94	96	99



CONTAMINATION

Soot %	%	0.9	0.4	0.7	0.8
Nitration (PA)	%	79	78	95	93
Sulfation (PA)	%	63	68	64	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	7	10	6
Sodium	ppm	4	4	4	3
Potassium	ppm	1	3	<1	<1



WEAR METALS

Iron	ppm	11	8	18	18
Copper	ppm	1	<1	1	1
Lead	ppm	<1	2	<1	<1
Tin	ppm	<1	1	<1	<1
Aluminum	ppm	▲ 13	6	8	4
Chromium	ppm	<1	<1	<1	1
Molybdenum	ppm	51	42	44	50
Nickel	ppm	0	<1	<1	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	2044	1643	1725	2002
Magnesium	ppm	601	518	531	587
Zinc	ppm	1294	1109	953	1039
Phosphorus	ppm	1027	872	806	921
Barium	ppm	0	0	<1	0
Boron	ppm	27	41	30	25

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 aluminum level is abnormal. 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.

Depot: ULSKIN
Unique No: 10649635
Signed: Sean Felton
Report Date: 20 Sep 2023



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GRAPHS

