



CONSTRUCTION EQUIPMENT

SWA120227 VOLVO L220H 3193 - DIESEL ENGINE



Sample No: VCP390365
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40
Job No: SWA120227



SAMPLE INFORMATION

Sample Number	VCP390365	VCP342783	VCP322963	VCP268667
Sample Date	28 Dec 2022	20 Jan 2022	22 Jul 2021	14 Jul 2020
Machine Hours	8000	6018	4950	2646
Oil Hours	0	0	900	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ATTENTION	NORMAL

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

OIL CONDITION

Visc @ 100°C	cSt	12.6	12.7	11.8	12.57
Base Number (BN)	mg KOH/g	8.9	10.7	---	---
Oxidation (PA)	%	85	86	67	79

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

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.1	0.2	0.1
Nitration (PA)	%	76	62	66	58
Sulfation (PA)	%	60	65	60	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	2.1	<1.0
Silicon	ppm	4	7	10	4
Sodium	ppm	2	4	3	5
Potassium	ppm	<1	<1	2	0

WEAR METALS

Iron	ppm	6	4	9	4
Copper	ppm	2	1	6	9
Lead	ppm	1	<1	1	<1
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	<1	2	0	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	43	43	64	29
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1681	1718	1427	1456
Magnesium	ppm	508	494	423	480
Zinc	ppm	1164	1048	989	894
Phosphorus	ppm	921	947	835	784
Barium	ppm	0	0	0	0
Boron	ppm	22	88	197	40

Depot: CALEAS
Unique No: 10286409
Signed: Wes Davis
Report Date: 13 Jan 2023



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GRAPHS

