



CONSTRUCTION EQUIPMENT

SWA305088-10 VOLVO L220H 3195 - DIESEL ENGINE



Sample No: VCP419114
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40
Job No: SWA305088-10



SAMPLE INFORMATION

Sample Number	VCP419114	VCP390231	VCP374138	VCP332099
Sample Date	21 Aug 2023	01 Nov 2022	20 Jun 2022	04 Jan 2022
Machine Hours	10636	8642	7636	6553
Oil Hours	0	0	1100	1200
Oil Changed	Changed	Changed	N/A	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

CALLANAN INDUSTRIES
 93 SULLIVAN RD
 MONTICELLO, NY
 US 12701
 Contact: Service Manager

OIL CONDITION

Visc @ 100°C	cSt	12.7	12.9	12.6	12.4
Base Number (BN)	mg KOH/g	6.9	9.2	8.3	6.3
Oxidation (PA)	%	84	92	85	76

T:
F:

CONTAMINATION

Soot %	%	0.4	0.6	0.4	0.6
Nitration (PA)	%	77	87	82	83
Sulfation (PA)	%	61	67	64	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	15	10	11	9
Sodium	ppm	3	2	2	2
Potassium	ppm	<1	1	0	2

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.

WEAR METALS

Iron	ppm	20	13	15	16
Copper	ppm	3	3	9	▲ 40
Lead	ppm	4	2	3	1
Tin	ppm	<1	<1	2	<1
Aluminum	ppm	6	4	4	4
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	41	42	41	29
Nickel	ppm	0	0	<1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	1610	1693	1518	1560
Magnesium	ppm	542	504	534	545
Zinc	ppm	1083	1109	1123	950
Phosphorus	ppm	917	904	852	755
Barium	ppm	0	0	0	0
Boron	ppm	17	19	19	23

Depot: CALMONNY
Unique No: 10617099
Signed: Wes Davis
Report Date: 24 Aug 2023



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GRAPHS

