



CONSTRUCTION EQUIPMENT

VOLVO L120H 633400 - DIESEL ENGINE



Sample No: VCP438997
Oil Type: VALVOLINE 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP438997	VCP437215	VCP437221	VCP433781
Sample Date	12 Apr 2024	20 Mar 2024	20 Feb 2024	15 Dec 2023
Machine Hours	0	2323	2033	1533
Oil Hours	0	290	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	MARGINAL	NORMAL

CITY CARTING
 221 OLD GATE LN
 MILFORD, CT
 US 06460
 Contact: TAVINS BANKS
 tavins@citycart.net
 T: (203)223-3885
 F:



OIL CONDITION

Visc @ 100°C	cSt	11.3	12.4	11.8	13.3
Base Number (BN)	mg KOH/g	7.0	7.1	6.0	5.9
Oxidation (PA)	%	43	37	44	37



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.2	0.2
Nitration (PA)	%	54	55	58	53
Sulfation (PA)	%	46	45	50	46
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	0.3	<1.0
Silicon	ppm	8	7	11	6
Sodium	ppm	1	0	1	<1
Potassium	ppm	<1	0	0	2



WEAR METALS

Iron	ppm	5	7	11	12
Copper	ppm	<1	2	12	<1
Lead	ppm	0	0	0	0
Tin	ppm	1	0	1	<1
Aluminum	ppm	3	3	6	3
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	79	22	25	28
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1799	2135	1769	2021
Magnesium	ppm	260	198	120	116
Zinc	ppm	981	1037	844	978
Phosphorus	ppm	819	899	753	768
Barium	ppm	0	0	<1	0
Boron	ppm	77	17	9	15

Diagnosis

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: CITMILCON
Unique No: 10980220
Signed: Don Baldrige
Report Date: 18 Apr 2024



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GRAPHS

