



# CONSTRUCTION EQUIPMENT

## VOLVO L120H 633400 - DIESEL ENGINE



**Sample No:** VCP436488  
**Oil Type:** VALVOLINE 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	VCP436488	VCP438997	VCP437215	VCP437221
Sample Date	08 May 2024	12 Apr 2024	20 Mar 2024	20 Feb 2024
Machine Hours	2798	0	2323	2033
Oil Hours	0	0	290	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	MARGINAL

**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	12.0	11.3	12.4	11.8
Base Number (BN)	mg KOH/g	6.6	7.0	7.1	6.0
Oxidation (PA)	%	35	43	37	44

### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.2	0.2
Nitration (PA)	%	51	54	55	58
Sulfation (PA)	%	43	46	45	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	0.3
Silicon	ppm	11	8	7	11
Sodium	ppm	3	1	0	1
Potassium	ppm	4	<1	0	0

### 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.

### WEAR METALS

Iron	ppm	8	5	7	11
Copper	ppm	3	<1	2	12
Lead	ppm	2	0	0	0
Tin	ppm	3	1	0	1
Aluminum	ppm	6	3	3	6
Chromium	ppm	3	<1	0	<1
Molybdenum	ppm	55	79	22	25
Nickel	ppm	3	0	0	0
Titanium	ppm	2	0	0	0
Silver	ppm	3	0	0	0
Manganese	ppm	2	0	0	<1
Vanadium	ppm	2	0	0	0

### ADDITIVES

Calcium	ppm	1859	1799	2135	1769
Magnesium	ppm	185	260	198	120
Zinc	ppm	956	981	1037	844
Phosphorus	ppm	815	819	899	753
Barium	ppm	2	0	0	<1
Boron	ppm	40	77	17	9

**Depot:** CITMILCON  
**Unique No:** 11033698  
**Signed:** Don Baldrige  
**Report Date:** 20 May 2024



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## GRAPHS

