



CONSTRUCTION EQUIPMENT

VOLVO L90H 5624326 - DIESEL ENGINE



Sample No: VCP430819
Oil Type: VALVOLINE 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP430819	VCP407158	VCP416426	VCP407665
Sample Date	01 Dec 2023	19 Oct 2023	08 Sep 2023	24 May 2023
Machine Hours	8030	7750	7531	7068
Oil Hours	280	219	463	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	NORMAL	NORMAL	NORMAL	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	12.4	13.6	13.0	12.0
Base Number (BN)	mg KOH/g	7.1	7.6	9.7	6.5
Oxidation (PA)	%	36	43	74	46

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 %	%	0.1	0.2	0.2	0.2
Nitration (PA)	%	49	52	53	60
Sulfation (PA)	%	44	46	58	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	5	7	4
Sodium	ppm	0	<1	2	0
Potassium	ppm	2	0	2	2



WEAR METALS

Iron	ppm	3	1	5	7
Copper	ppm	0	0	<1	1
Lead	ppm	0	0	<1	0
Tin	ppm	0	0	0	<1
Aluminum	ppm	1	2	<1	2
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	57	18	44	60
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1938	1856	1883	2068
Magnesium	ppm	176	172	497	178
Zinc	ppm	932	954	1201	1066
Phosphorus	ppm	741	881	956	888
Barium	ppm	4	4	0	0
Boron	ppm	30	12	41	26

Depot: CITMILCON
Unique No: 10776002
Signed: Wes Davis
Report Date: 07 Dec 2023



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GRAPHS

