

LIEBHERR

CONSTRUCTION EQUIPMENT



[[374734]] VOLVO L70G 614584 - Diesel Engine

Sample No: LH394705

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3



SAMPLE INFORMATION

Sample Number	LH394705	VCP332593	VCP332780	WC273523
Sample Date	11 Aug 2023	08 Aug 2022	23 Mar 2022	03 Nov 2020
Machine Hours	10885	9020	0	6485
Oil Hours	0	0	500	1000
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	ABNORMAL	NORMAL

STRONGCO EQUIP (AB)

6 - 38403 BURNT LAKE TRAIL
RED DEER COUNTY, AB
CA T4S 2L4
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OIL CONDITION

Visc @ 100°C	cSt	13.6	12.7	13.5	13.4
Oxidation (PA)	%	96	85	81	72



CONTAMINATION

Soot %	%	1.2	0.5	1	0.7
Nitration (PA)	%	98	69	93	82
Sulfation (PA)	%	70	65	65	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	6	7	6
Sodium	ppm	7	3	2	3
Potassium	ppm	1	<1	<1	2

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Aluminum ppm levels are abnormal. Piston wear is indicated. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



WEAR METALS

Iron	ppm	59	22	53	26
Copper	ppm	3	<1	2	2
Lead	ppm	4	<1	2	2
Tin	ppm	2	<1	1	<1
Aluminum	ppm	19	8	13	11
Chromium	ppm	2	<1	2	1
Molybdenum	ppm	47	42	56	7
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	<1	<1	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	<1



ADDITIVES

Calcium	ppm	1713	1639	1166	1398
Magnesium	ppm	579	546	940	725
Zinc	ppm	1157	1114	1193	826
Phosphorus	ppm	984	929	988	677
Barium	ppm	0	0	0	0
Boron	ppm	12	25	3	28

Depot: VOLVO9652
Unique No: 5628929
Signed: Kevin Marson
Report Date: 15 Aug 2023



GRAPHS

