



CONSTRUCTION EQUIPMENT

VOLVO L110H 631951 - DIESEL ENGINE



Sample No: VCP415950
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP415950	VCP393928	VCP386755	VCP344966
Sample Date	21 Jul 2023	09 Mar 2023	22 Sep 2022	17 Dec 2021
Machine Hours	2484	1953	1413	908
Oil Hours	0	500	500	908
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

RIPA AND ASSOCIATES

10149 FISHER AVENUE
TAMPA, FL
US 33619
Contact: PM Services
PMServices@ripaconstruction.com
T:
F:



OIL CONDITION

Visc @ 100°C	cSt	13.0	13.4	13.2	12.7
Base Number (BN)	mg KOH/g	10.2	10.1	11.5	11.1
Oxidation (PA)	%	80	78	85	78

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

Soot %	%	0.3	0.4	0.4	0.3
Nitration (PA)	%	64	64	70	66
Sulfation (PA)	%	60	62	65	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	4	6	7
Sodium	ppm	2	<1	1	3
Potassium	ppm	<1	2	0	2



WEAR METALS

Iron	ppm	11	17	18	15
Copper	ppm	5	6	7	8
Lead	ppm	1	1	0	2
Tin	ppm	2	2	1	2
Aluminum	ppm	7	8	12	14
Chromium	ppm	<1	<1	<1	2
Molybdenum	ppm	41	35	42	41
Nickel	ppm	<1	<1	0	<1
Titanium	ppm	5	17	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	0	<1
Vanadium	ppm	0	<1	0	<1



ADDITIVES

Calcium	ppm	1722	1728	1619	1605
Magnesium	ppm	533	472	533	533
Zinc	ppm	1209	1148	1108	1137
Phosphorus	ppm	972	949	951	917
Barium	ppm	0	2	0	0
Boron	ppm	33	43	26	38

Depot: RIPTAM
Unique No: 10605790
Signed: Wes Davis
Report Date: 17 Aug 2023



CONSTRUCTION EQUIPMENT



GRAPHS

