



CONSTRUCTION EQUIPMENT

687196 VOLVO L110H 632273 - DIESEL ENGINE



Sample No: VCP437937
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 687196



SAMPLE INFORMATION

Sample Number	VCP437937	VCP412114	VCP424509	VCP423512
Sample Date	11 Mar 2024	28 Jun 2023	20 Jun 2023	23 Mar 2023
Machine Hours	3719	2095	2490	1526
Oil Hours	500	500	500	500
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	12.8	12.4	13.1	12.2
Base Number (BN)	mg KOH/g	10.0	10.1	10.4	10.0
Oxidation (PA)	%	77	80	80	80

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.3	0.2
Nitration (PA)	%	58	61	69	64
Sulfation (PA)	%	58	60	61	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	4	4	6
Sodium	ppm	1	3	2	2
Potassium	ppm	<1	0	2	0

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.

WEAR METALS

Iron	ppm	7	8	12	12
Copper	ppm	<1	<1	2	2
Lead	ppm	1	0	<1	0
Tin	ppm	<1	0	1	<1
Aluminum	ppm	3	2	5	5
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	44	52	49	89
Nickel	ppm	<1	0	<1	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	1
Vanadium	ppm	<1	<1	<1	0

ADDITIVES

Calcium	ppm	1791	1744	1670	1719
Magnesium	ppm	591	526	494	545
Zinc	ppm	1245	1120	1087	1138
Phosphorus	ppm	988	943	870	951
Barium	ppm	0	0	0	0
Boron	ppm	43	42	27	50

Depot: RIPTAM
Unique No: 10970505
Signed: Wes Davis
Report Date: 12 Apr 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

