



CONSTRUCTION EQUIPMENT

716513 VOLVO L110H 631235 - DIESEL ENGINE



Sample No: VCP439679
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 716513



SAMPLE INFORMATION

Sample Number	VCP439679	VCP429373D	VCP420252	VCP393538
Sample Date	21 May 2024	17 Jan 2024	05 May 2023	03 Jan 2023
Machine Hours	12318	11636	10451	9673
Oil Hours	500	0	500	500
Oil Changed	Changed	N/A	Changed	Changed
Sample Status	NORMAL	ABNORMAL	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	13.6	13.2	13.33
Base Number (BN)	mg KOH/g	9.9	7.2	10.0	8.0
Oxidation (PA)	%	81	69	86	58

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 %	%	0.4	0.5	0.5	0.2
Nitration (PA)	%	71	85	86	74
Sulfation (PA)	%	60	57	61	51
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	27	6	5
Sodium	ppm	2	0	3	2
Potassium	ppm	<1	3	2	<1



WEAR METALS

Iron	ppm	49	132	15	10
Copper	ppm	<1	6	<1	<1
Lead	ppm	0	0	<1	<1
Tin	ppm	0	<1	1	<1
Aluminum	ppm	2	6	5	3
Chromium	ppm	0	3	<1	<1
Molybdenum	ppm	42	63	49	79
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	<1	0	1
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	1783	1929	1717	1935
Magnesium	ppm	410	234	582	281
Zinc	ppm	1039	1196	1255	1218
Phosphorus	ppm	897	949	998	1006
Barium	ppm	0	5	0	0
Boron	ppm	21	28	18	38

Depot: RIPTAM
Unique No: 11087185
Signed: Wes Davis
Report Date: 20 Jun 2024



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GRAPHS

