



CONSTRUCTION EQUIPMENT

VOLVO L110H 631289 - DIESEL ENGINE



Sample No: VCP432481
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP432481	VCP431776	VCP408284	VCP375985
Sample Date	26 Oct 2023	06 Oct 2023	05 Jun 2023	14 Jun 2022
Machine Hours	8947	8187	7680	6226
Oil Hours	0	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	13.2	12.1	13.2
Base Number (BN)	mg KOH/g	10.3	10.4	10.3	11.4
Oxidation (PA)	%	82	81	81	86

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	0.4
Nitration (PA)	%	69	71	72	70
Sulfation (PA)	%	59	60	61	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	7	5	6
Sodium	ppm	0	2	2	2
Potassium	ppm	<1	0	0	0



WEAR METALS

Iron	ppm	18	13	11	13
Copper	ppm	1	1	1	2
Lead	ppm	0	<1	0	<1
Tin	ppm	0	<1	<1	2
Aluminum	ppm	4	3	3	5
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	47	45	43	40
Nickel	ppm	0	0	0	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	1643	1681	1559	1689
Magnesium	ppm	485	550	478	503
Zinc	ppm	1061	1237	1019	1078
Phosphorus	ppm	853	1010	837	894
Barium	ppm	2	0	0	0
Boron	ppm	25	23	27	37

Depot: RIPTAM
Unique No: 10776012
Signed: Wes Davis
Report Date: 07 Dec 2023



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VOLVO GRAPHS

