



CONSTRUCTION EQUIPMENT

VOLVO L90H 624818 - DIESEL ENGINE



Sample No: VCP452250
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP452250	VCP416360	VCP415939	VCP360703
Sample Date	30 Jan 2024	04 Oct 2023	05 Jun 2023	07 Apr 2022
Machine Hours	4037	3598	3023	2493
Oil Hours	0	0	500	500
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	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	12.6	12.8	13.4	13.2
Base Number (BN)	mg KOH/g	10.5	10.8	11.3	11.7
Oxidation (PA)	%	76	81	83	83

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 %	%	0.3	0.5	0.5	0.4
Nitration (PA)	%	56	63	70	68
Sulfation (PA)	%	59	61	61	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	8	7
Sodium	ppm	0	2	2	3
Potassium	ppm	2	2	<1	1



WEAR METALS

Iron	ppm	13	10	14	15
Copper	ppm	<1	1	<1	<1
Lead	ppm	0	<1	0	0
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	6	9	▲ 18	9
Chromium	ppm	<1	<1	<1	1
Molybdenum	ppm	38	39	38	46
Nickel	ppm	0	0	0	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	1741	1544	1602	1866
Magnesium	ppm	486	487	486	659
Zinc	ppm	1138	1061	1044	1364
Phosphorus	ppm	872	896	865	1074
Barium	ppm	5	0	0	0
Boron	ppm	43	41	33	35

Depot: RIPTAM
Unique No: 10863261
Signed: Wes Davis
Report Date: 06 Feb 2024



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GRAPHS

