



CONSTRUCTION EQUIPMENT

VOLVO L90H 624818 - DIESEL ENGINE



Sample No: VCP416360
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP416360	VCP415939	VCP360703	VCP313197
Sample Date	04 Oct 2023	05 Jun 2023	07 Apr 2022	14 Oct 2021
Machine Hours	3598	3023	2493	2055
Oil Hours	0	500	500	1500
Oil Changed	Changed	Changed	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	12.8	13.4	13.2	13.1
Base Number (BN)	mg KOH/g	10.8	11.3	11.7	---
Oxidation (PA)	%	81	83	83	76

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 %	%	0.5	0.5	0.4	0.4
Nitration (PA)	%	63	70	68	68
Sulfation (PA)	%	61	61	63	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	8	7	8
Sodium	ppm	2	2	3	3
Potassium	ppm	2	<1	1	0



WEAR METALS

Iron	ppm	10	14	15	20
Copper	ppm	1	<1	<1	1
Lead	ppm	<1	0	0	1
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	9	▲ 18	9	10
Chromium	ppm	<1	<1	1	2
Molybdenum	ppm	39	38	46	54
Nickel	ppm	0	0	<1	<1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1544	1602	1866	1714
Magnesium	ppm	487	486	659	626
Zinc	ppm	1061	1044	1364	1226
Phosphorus	ppm	896	865	1074	1026
Barium	ppm	0	0	0	0
Boron	ppm	41	33	35	26

Depot: RIPTAM
Unique No: 10714109
Signed: Wes Davis
Report Date: 28 Oct 2023



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GRAPHS

