



CONSTRUCTION EQUIPMENT

VOLVO A40F 342498 WET - DIESEL ENGINE



Sample No: VCP440640
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP440640	VCP414659	VCP407863	VCP394251
Sample Date	07 Dec 2023	18 Sep 2023	07 Jun 2023	27 Feb 2023
Machine Hours	8915	8432	7967	7463
Oil Hours	0	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ATTENTION	ATTENTION	ATTENTION

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	12.0	12.2	12.1
Base Number (BN)	mg KOH/g	9.7	9.8	10.0	9.3
Oxidation (PA)	%	79	78	78	67

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 %	%	0.1	0.2	0.2	0.2
Nitration (PA)	%	58	59	63	63
Sulfation (PA)	%	58	59	60	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	1.6
Silicon	ppm	5	8	5	6
Sodium	ppm	2	2	1	0
Potassium	ppm	0	<1	0	1



WEAR METALS

Iron	ppm	7	8	6	7
Copper	ppm	0	<1	<1	2
Lead	ppm	0	1	0	<1
Tin	ppm	0	1	<1	<1
Aluminum	ppm	4	6	3	5
Chromium	ppm	0	<1	0	<1
Molybdenum	ppm	42	42	42	51
Nickel	ppm	0	2	1	6
Titanium	ppm	0	<1	0	1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	<1	<1



ADDITIVES

Calcium	ppm	1858	1630	1539	1532
Magnesium	ppm	529	522	494	504
Zinc	ppm	1180	1183	1028	1109
Phosphorus	ppm	1002	947	856	901
Barium	ppm	0	0	0	2
Boron	ppm	36	31	29	22

Depot: RIPTAM
Unique No: 10995436
Signed: Wes Davis
Report Date: 25 Apr 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

