



CONSTRUCTION EQUIPMENT

VOLVO A40 352852 - DIESEL ENGINE



Sample No: VCP451196
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP451196	VCP394047	VCP364335	VCP364583
Sample Date	09 May 2024	10 Mar 2023	03 Nov 2022	18 Aug 2022
Machine Hours	5118	2973	2424	1982
Oil Hours	0	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	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	12.1	12.1	12.7	12.6
Base Number (BN)	mg KOH/g	8.0	9.5	11.2	9.9
Oxidation (PA)	%	61	79	84	65

Diagnosis
 Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.2	0.3
Nitration (PA)	%	68	63	64	68
Sulfation (PA)	%	53	61	65	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	0.7	<1.0	<1.0
Silicon	ppm	4	6	5	5
Sodium	ppm	3	2	0	<1
Potassium	ppm	0	<1	0	0



WEAR METALS

Iron	ppm	6	6	5	5
Copper	ppm	6	4	3	4
Lead	ppm	0	0	<1	<1
Tin	ppm	0	<1	<1	0
Aluminum	ppm	2	2	2	<1
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	59	45	45	55
Nickel	ppm	<1	1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1245	1708	1656	1076
Magnesium	ppm	962	557	577	855
Zinc	ppm	1225	1186	1117	1140
Phosphorus	ppm	1033	969	922	937
Barium	ppm	0	0	0	0
Boron	ppm	0	36	35	6

Depot: RIPTAM
Unique No: 11029633
Signed: Sean Felton
Report Date: 16 May 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

