



CONSTRUCTION EQUIPMENT

646466 VOLVO A30G 740270 - DIESEL ENGINE



Sample No: VCP440620
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 646466



SAMPLE INFORMATION

Sample Number	VCP440620	VCP385814	VCP386752	VCP378457
Sample Date	13 Dec 2023	23 Nov 2022	09 Sep 2022	01 Jun 2022
Machine Hours	11945	10327	9917	9479
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	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	▲ 11.5	▲ 12.2	▲ 12.3	▲ 12.2
Base Number (BN)	mg KOH/g	■ 7.4	■ 10.1	■ 10.6	■ 9.4
Oxidation (PA)	%	77	81	83	80

Diagnosis

No corrective action is recommended at this time. 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. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.6	■ 0.4	■ 0.4	■ 0.4
Nitration (PA)	%	80	70	71	70
Sulfation (PA)	%	58	65	64	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	▲ 2.7	<1.0	<1.0	<1.0
Silicon	ppm	■ 5	■ 4	■ 10	■ 4
Sodium	ppm	■ 2	■ 2	■ 3	■ 4
Potassium	ppm	■ 0	■ 0	■ <1	■ 3

WEAR METALS

Iron	ppm	■ 11	■ 6	■ 5	■ 6
Copper	ppm	■ 2	■ <1	■ <1	■ <1
Lead	ppm	■ 2	■ <1	■ 0	■ <1
Tin	ppm	■ <1	■ <1	■ <1	■ <1
Aluminum	ppm	■ 2	■ 1	■ 0	■ 2
Chromium	ppm	■ <1	■ <1	■ <1	■ <1
Molybdenum	ppm	■ 43	■ 36	■ 36	■ 44
Nickel	ppm	■ 0	■ 0	■ 0	■ <1
Titanium	ppm	<1	■ 11	7	<1
Silver	ppm	■ 0	■ 0	■ 0	■ <1
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	0	0	<1

ADDITIVES

Calcium	ppm	■ 1688	■ 1613	■ 1508	■ 1623
Magnesium	ppm	■ 386	■ 527	■ 490	■ 460
Zinc	ppm	■ 988	■ 1165	■ 1058	■ 1129
Phosphorus	ppm	■ 852	■ 909	■ 905	■ 926
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 20	■ 37	■ 29	■ 27

Depot: RIPTAM
Unique No: 10845926
Signed: Sean Felton
Report Date: 26 Jan 2024



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GRAPHS

