



CONSTRUCTION EQUIPMENT

1454 VOLVO A35G 342092 - DIESEL ENGINE



Sample No: VCP441939
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 1454



SAMPLE INFORMATION

Sample Number	VCP441939	VCP325282	VCP307398	VCP285229
Sample Date	13 Dec 2023	26 Aug 2021	09 Apr 2021	17 Jul 2020
Machine Hours	7329	6172	5308	3750
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	ATTENTION	ATTENTION	NORMAL

VCES- VOLVO CONSTRUCTION EQUIPMENT
 8594 FRUITRIDGE ROAD
 SACRAMENTO, CA
 US 95826
 Contact: RAY KRANZUSCH
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 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	▲ 11.3	▲ 12.1	▲ 12.1	■ 12.4
Base Number (BN)	mg KOH/g	■ 9.7	---	---	---
Oxidation (PA)	%	83	91	112	105



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.1	■ 0.1	■ 0.2	■ 0.2
Nitration (PA)	%	60	78	99	92
Sulfation (PA)	%	62	63	75	69
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	■ 3.6	<1.0	■ 2.6	<1.0
Silicon	ppm	■ 8	■ 6	■ 7	■ 5
Sodium	ppm	■ 0	■ 2	■ 3	■ 3
Potassium	ppm	■ 2	■ 0	■ 8	■ <1



WEAR METALS

Iron	ppm	■ 17	■ 7	■ 10	■ 8
Copper	ppm	■ 25	■ 2	■ 5	■ 10
Lead	ppm	■ <1	■ <1	■ 2	■ <1
Tin	ppm	■ <1	■ <1	■ 0	■ 1
Aluminum	ppm	■ 3	■ 2	■ 2	■ 2
Chromium	ppm	■ <1	■ <1	■ <1	■ <1
Molybdenum	ppm	■ 40	■ 38	■ 33	■ 38
Nickel	ppm	■ <1	■ 0	■ <1	■ <1
Titanium	ppm	<1	<1	<1	0
Silver	ppm	■ 0	■ <1	■ 0	■ 0
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	■ 1563	■ 1614	■ 1522	■ 1692
Magnesium	ppm	■ 470	■ 463	■ 447	■ 464
Zinc	ppm	■ 1064	■ 1081	■ 898	■ 753
Phosphorus	ppm	■ 891	■ 881	■ 718	607
Barium	ppm	■ 9	■ 0	■ 0	■ 0
Boron	ppm	■ 50	■ 29	■ 12	■ 16

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. Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type.

Depot: VOLVO4485
Unique No: 10805963
Signed: Angela Borella
Report Date: 29 Dec 2023



CONSTRUCTION EQUIPMENT



GRAPHS

