



CONSTRUCTION EQUIPMENT

619724 STONE CO VOLVO EC350E 314091 - DIESEL ENGINE



Sample No: VCP431522
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 619724 STONE CO



SAMPLE INFORMATION

Sample Number	VCP431522	VCP412437	VCP407595	VCP398073
Sample Date	12 Oct 2023	27 Jul 2023	15 May 2023	06 Mar 2023
Machine Hours	5273	4844	4396	3906
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

ALTA EQUIPMENT COMPANY - METRO WEST
56195 PONTIAC TRAIL
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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.9	▲ 11.9	▲ 12.0	▲ 11.8
Base Number (BN)	mg KOH/g	■ 8.7	■ 7.9	■ 8.2	■ 7.8
Oxidation (PA)	%	61	61	68	63

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

Soot %	%	■ 0.1	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	71	69	72	80
Sulfation (PA)	%	52	53	55	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	■ 3	■ 3	■ 3	■ 5
Sodium	ppm	■ 2	■ 2	■ 2	■ <1
Potassium	ppm	■ 1	■ <1	■ 1	■ 0



WEAR METALS

Iron	ppm	■ 2	■ 4	■ 3	■ 5
Copper	ppm	■ 2	■ <1	■ <1	■ 1
Lead	ppm	■ <1	■ 1	■ <1	■ <1
Tin	ppm	■ 0	■ <1	■ <1	■ <1
Aluminum	ppm	■ <1	■ <1	■ 0	■ 0
Chromium	ppm	■ 0	■ 0	■ 0	■ 0
Molybdenum	ppm	■ 56	■ 63	■ 56	■ 59
Nickel	ppm	■ 0	■ 0	■ 0	■ 0
Titanium	ppm	0	0	0	0
Silver	ppm	■ 0	■ 0	■ 0	■ <1
Manganese	ppm	■ <1	■ 0	■ <1	■ <1
Vanadium	ppm	0	<1	0	<1



ADDITIVES

Calcium	ppm	■ 1064	■ 1197	■ 1255	■ 1051
Magnesium	ppm	■ 972	■ 1050	■ 901	■ 947
Zinc	ppm	■ 1112	■ 1359	■ 1269	■ 1251
Phosphorus	ppm	■ 1040	■ 1126	■ 1004	■ 974
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 0	■ 0	■ 7	■ <1

Depot: VOLVO2990
Unique No: 10729732
Signed: Don Baldrige
Report Date: 09 Nov 2023



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GRAPHS

