



CONSTRUCTION EQUIPMENT

595289 MADOR VOLVO ECR235DL 210582 - DIESEL ENGINE



Sample No: VCP417000
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 595289 MADOR



SAMPLE INFORMATION

Sample Number	VCP417000	VCP396062	VCP290301	VCP232418
Sample Date	08 Sep 2023	17 Nov 2022	14 May 2021	18 Sep 2018
Machine Hours	5770	5129	4100	2567
Oil Hours	500	1529	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	ABNORMAL

ALTA EQUIPMENT COMPANY - METRO WEST
 56195 PONTIAC TRAIL
 NEW HUDSON, MI
 US 48165
 Contact: PAUL CONZ
 paul.conz@altg.com
 T: (313)348-8861
 F: (248)356-2029



OIL CONDITION

Visc @ 100°C	cSt	13.7	12.7	13.6	13.66
Base Number (BN)	mg KOH/g	8.8	9.1	---	---
Oxidation (PA)	%	65	93	42	74



CONTAMINATION

Soot %	%	0.3	0.4	0.1	0.4
Nitration (PA)	%	73	100	65	83
Sulfation (PA)	%	53	66	50	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	13	4	12
Sodium	ppm	2	<1	3	5
Potassium	ppm	<1	2	2	3



WEAR METALS

Iron	ppm	78	▲ 115	31	▲ 116
Copper	ppm	3	4	2	8
Lead	ppm	<1	<1	0	0
Tin	ppm	1	1	<1	0
Aluminum	ppm	10	10	3	9
Chromium	ppm	1	1	<1	2
Molybdenum	ppm	60	39	2	48
Nickel	ppm	<1	0	<1	1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	1	1	<1	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1229	1891	2081	1326
Magnesium	ppm	992	435	81	885
Zinc	ppm	1366	1165	962	1037
Phosphorus	ppm	1089	918	831	804
Barium	ppm	0	0	0	0
Boron	ppm	2	16	8	10

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.

Depot: VOLVO2990
Unique No: 10647171
Signed: Jonathan Hester
Report Date: 19 Sep 2023



CONSTRUCTION EQUIPMENT



GRAPHS

