



CONSTRUCTION EQUIPMENT

SPM594244 VOLVO ECR145E 315030 - DIESEL ENGINE



Sample No: VCP412992
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SPM594244



SAMPLE INFORMATION

Sample Number	VCP412992	VCP405600	VCP369988	VCP359985
Sample Date	12 Aug 2023	23 Mar 2023	17 Oct 2022	05 May 2022
Machine Hours	2484	2010	1519	997
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

JON M HALL COMPANY
 1920 BOOTHE CIRCLE SUITE 110
 LONGWOOD, FL
 US 32750
 Contact: SERVICE MANAGER



OIL CONDITION

Visc @ 100°C	cSt	13.2	13.2	13.4	13.3
Base Number (BN)	mg KOH/g	9.7	10.6	11.4	10.7
Oxidation (PA)	%	75	81	85	82

T: (407)215-0410
 F:

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.



CONTAMINATION

Soot %	%	0.2	0.3	0.3	0.2
Nitration (PA)	%	60	64	73	70
Sulfation (PA)	%	57	60	64	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	9	8	8
Sodium	ppm	<1	3	1	3
Potassium	ppm	2	<1	0	4



WEAR METALS

Iron	ppm	12	15	12	13
Copper	ppm	1	1	1	3
Lead	ppm	0	0	0	2
Tin	ppm	<1	<1	<1	2
Aluminum	ppm	2	4	1	4
Chromium	ppm	<1	1	1	1
Molybdenum	ppm	40	46	47	45
Nickel	ppm	<1	<1	<1	2
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	1	<1
Vanadium	ppm	0	<1	<1	<1



ADDITIVES

Calcium	ppm	1852	1718	1821	1891
Magnesium	ppm	457	500	433	404
Zinc	ppm	1122	1133	1164	1100
Phosphorus	ppm	949	949	882	949
Barium	ppm	0	2	0	0
Boron	ppm	29	33	26	45

Depot: JONLON
Unique No: 10617206
Signed: Wes Davis
Report Date: 24 Aug 2023



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GRAPHS

