



CONSTRUCTION EQUIPMENT

TMR-OCALA 6TH ST SPM567633 VOLVO L90G 3185 - DIESEL ENGINE



Sample No: VCP412735
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SPM567633



SAMPLE INFORMATION

Sample Number	VCP412735	DJJ0018303	VCP381508	VCP346515
Sample Date	26 Jul 2023	14 Apr 2023	31 Oct 2022	23 Feb 2022
Machine Hours	12394	12187	11911	11414
Oil Hours	30	0	0	0
Oil Changed	Not Chngd	N/A	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

TRADEMARK METALS RECYCLING - OCALA - 6TH STREET
 2402 NW 6TH STREET
 OCALA, FL
 US 34475
 Contact: RYAN BOWDEN



OIL CONDITION

Visc @ 100°C	cSt	13.3	13.4	12.8	13.1
Base Number (BN)	mg KOH/g	11.0	9.3	12	10.3
Oxidation (PA)	%	76	77	85	78

T: (352)351-3383
 F: (352)351-4439

Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. 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 %	%	0.1	0.1	0.2	0.2
Nitration (PA)	%	40	52	58	56
Sulfation (PA)	%	60	55	64	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	▲ 24	7	5	7
Sodium	ppm	2	4	7	2
Potassium	ppm	1	<1	0	0



WEAR METALS

Iron	ppm	20	8	7	17
Copper	ppm	4	<1	<1	1
Lead	ppm	0	0	<1	1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	▲ 6	9	6	13
Chromium	ppm	3	<1	<1	1
Molybdenum	ppm	39	40	43	39
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1613	1443	1693	1654
Magnesium	ppm	488	514	491	517
Zinc	ppm	1095	988	1053	1064
Phosphorus	ppm	906	870	888	928
Barium	ppm	0	0	0	0
Boron	ppm	66	54	58	52

Depot: TRAOCA6
Unique No: 10579924
Signed: Jonathan Hester
Report Date: 03 Aug 2023



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VOLVO GRAPHS

