



CONSTRUCTION EQUIPMENT

W14408 VOLVO L110H 631820 - DIESEL ENGINE



Sample No: VCP424362
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W14408



SAMPLE INFORMATION

Sample Number	VCP424362	VCP411470	VCP367736	VCP374255
Sample Date	10 Jul 2023	11 Apr 2023	09 Jan 2023	10 Jun 2022
Machine Hours	5538	5083	4597	3617
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.5	13.2	13.7	13.3
Base Number (BN)	mg KOH/g	10.3	8.9	9.2	9.8
Oxidation (PA)	%	86	81	86	78



CONTAMINATION

Soot %	%	0.4	0.2	0.4	0.3
Nitration (PA)	%	67	61	77	68
Sulfation (PA)	%	64	56	61	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	5	6	7
Sodium	ppm	2	2	3	3
Potassium	ppm	2	1	<1	<1



WEAR METALS

Iron	ppm	8	9	13	13
Copper	ppm	1	<1	2	2
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	<1	1	1
Aluminum	ppm	6	4	5	6
Chromium	ppm	<1	<1	1	<1
Molybdenum	ppm	45	45	41	48
Nickel	ppm	0	<1	<1	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1820	1643	1756	1822
Magnesium	ppm	583	501	552	571
Zinc	ppm	1039	953	987	1181
Phosphorus	ppm	846	778	798	1049
Barium	ppm	0	0	0	0
Boron	ppm	33	50	35	57

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: VOLVO0080
Unique No: 10562288
Signed: Wes Davis
Report Date: 18 Jul 2023



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GRAPHS

