



CONSTRUCTION EQUIPMENT

40232 IAA VOLVO L90H 624541 - DIESEL ENGINE



Sample No: VCP415653
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 40232 IAA



SAMPLE INFORMATION

Sample Number	VCP415653	VCP407132	VCP398955	VCP367567
Sample Date	20 Sep 2023	19 May 2023	24 Jan 2023	15 Nov 2022
Machine Hours	7513	7028	6526	6137
Oil Hours	0	0	1000	500
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



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OIL CONDITION

Visc @ 100°C	cSt	14.2	14.4	14.6	14.2
Base Number (BN)	mg KOH/g	9.5	9.8	11.0	12.4
Oxidation (PA)	%	89	99	89	92



CONTAMINATION

Soot %	%	0.8	2.1	1.2	1.5
Nitration (PA)	%	78	103	78	87
Sulfation (PA)	%	65	75	67	72
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	5	9
Sodium	ppm	2	6	3	2
Potassium	ppm	1	5	0	<1



WEAR METALS

Iron	ppm	14	23	16	22
Copper	ppm	<1	<1	<1	<1
Lead	ppm	<1	2	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	<1	<1	3	3
Chromium	ppm	<1	<1	<1	1
Molybdenum	ppm	45	43	45	50
Nickel	ppm	0	0	<1	<1
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1946	1927	1743	1835
Magnesium	ppm	589	552	537	568
Zinc	ppm	1248	1233	1165	1231
Phosphorus	ppm	1006	958	936	967
Barium	ppm	0	0	0	0
Boron	ppm	22	26	32	30

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: VOLVO0013
Unique No: 10658580
Signed: Wes Davis
Report Date: 22 Sep 2023

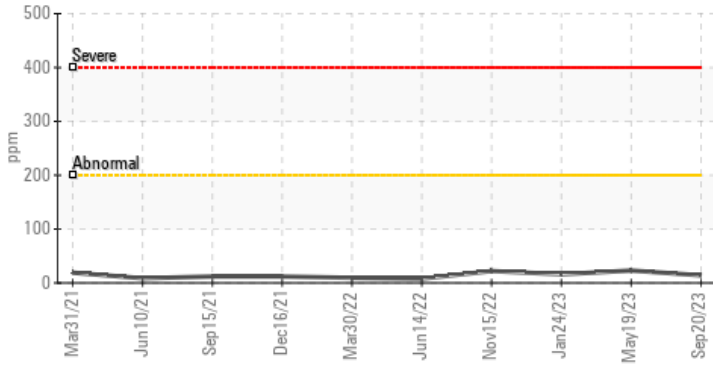


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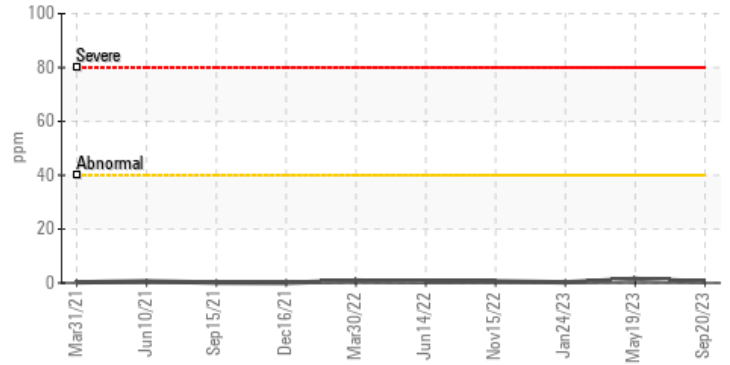


GRAPHS

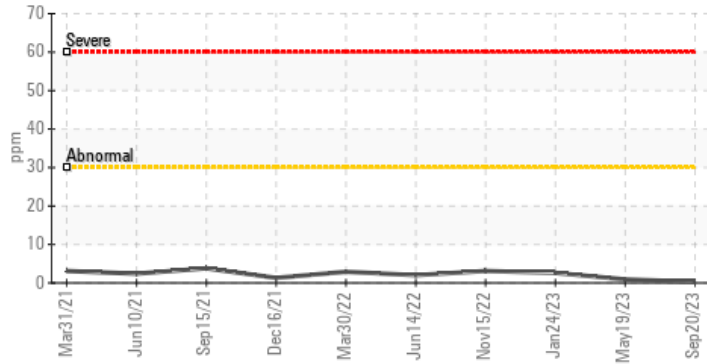
Iron (ppm)



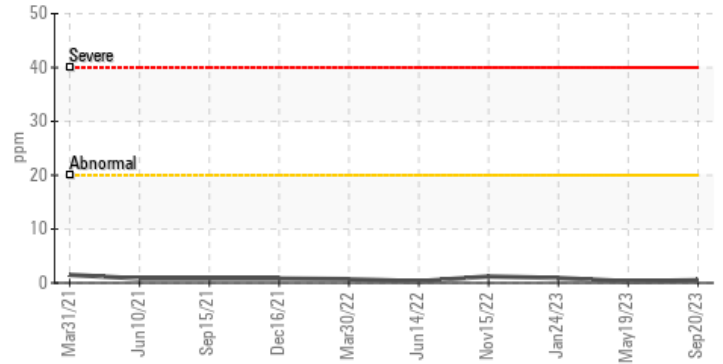
Lead (ppm)



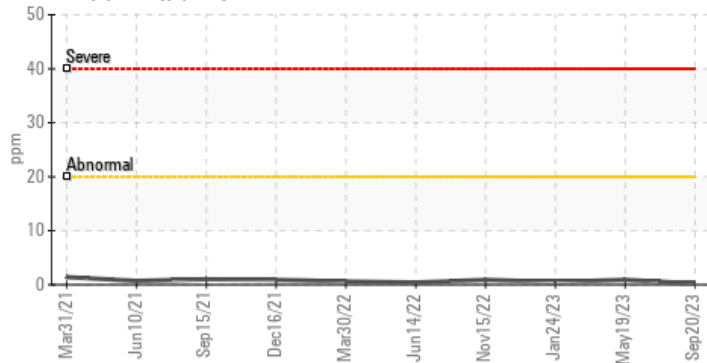
Aluminum (ppm)



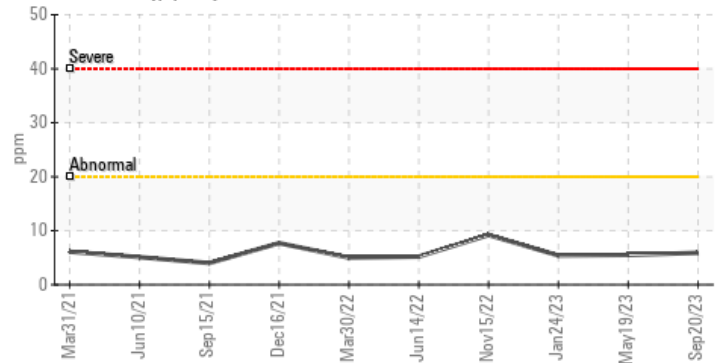
Chromium (ppm)



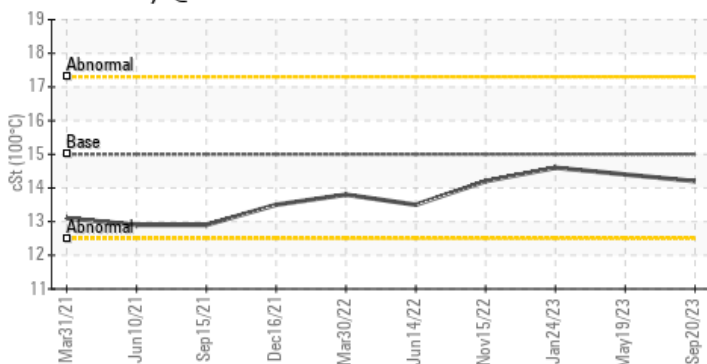
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

