



CONSTRUCTION EQUIPMENT

A12150 WM VOLVO L90H 623537 - DIESEL ENGINE



Sample No: VCP443207
Oil Type: MOBIL 15W40
Job No: A12150 WM



SAMPLE INFORMATION

Sample Number	VCP443207	VCP412829	VCP422785	VCP386456
Sample Date	21 Feb 2024	20 Sep 2023	19 May 2023	14 Dec 2022
Machine Hours	12205	11805	11200	10665
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

HOFFMAN EQUIPMENT - LIONVILLE
 120 GORDON DRIVE
 LIONVILLE, PA
 US 19341
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OIL CONDITION

Visc @ 100°C	cSt	12.8	14.3	14.0	13.2
Base Number (BN)	mg KOH/g	6.3	6.5	7.5	10.9
Oxidation (PA)	%	41	45	55	102



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	1	1.3	0.8	0.4
Nitration (PA)	%	64	70	73	78
Sulfation (PA)	%	51	54	54	72
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	5	6
Sodium	ppm	1	5	2	0
Potassium	ppm	2	5	3	2



WEAR METALS

Iron	ppm	20	20	13	13
Copper	ppm	2	3	1	2
Lead	ppm	<1	1	0	0
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	6	6	4	8
Chromium	ppm	2	<1	<1	<1
Molybdenum	ppm	19	18	32	47
Nickel	ppm	1	<1	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	1	1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1658	2737	2001	1815
Magnesium	ppm	214	183	462	502
Zinc	ppm	959	1410	1265	1149
Phosphorus	ppm	800	1159	993	970
Barium	ppm	1	0	0	0
Boron	ppm	8	0	5	34

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: VOLVO8879
Unique No: 10900921
Signed: Wes Davis
Report Date: 29 Feb 2024

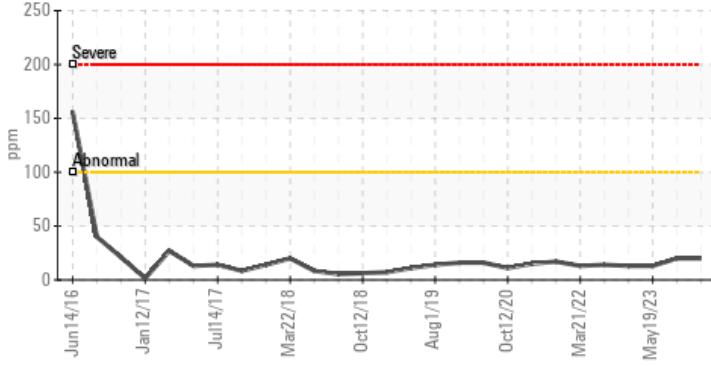


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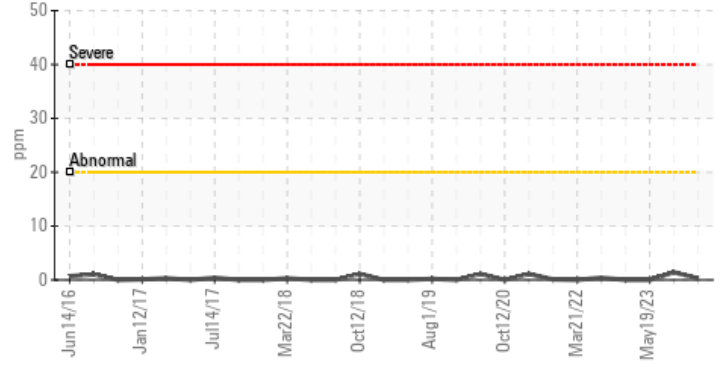


GRAPHS

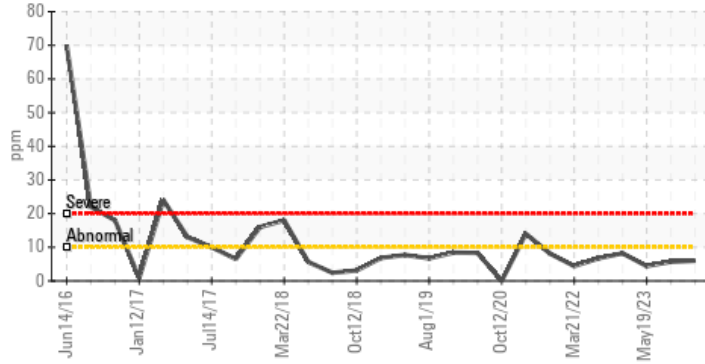
Iron (ppm)



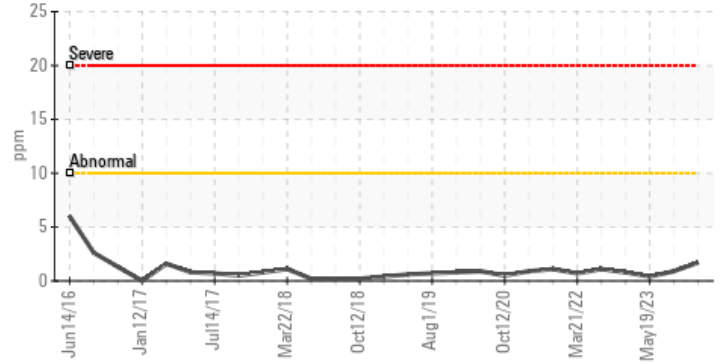
Lead (ppm)



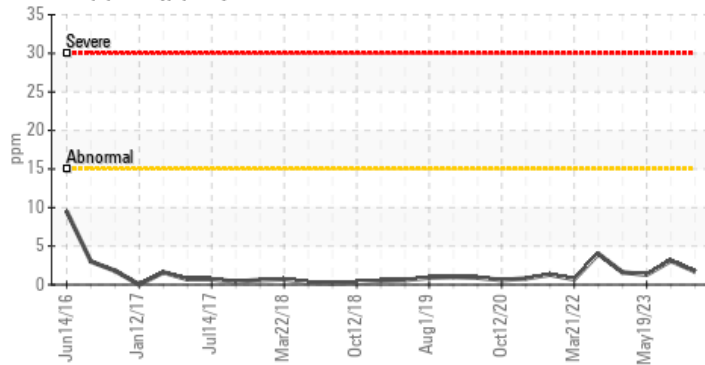
Aluminum (ppm)



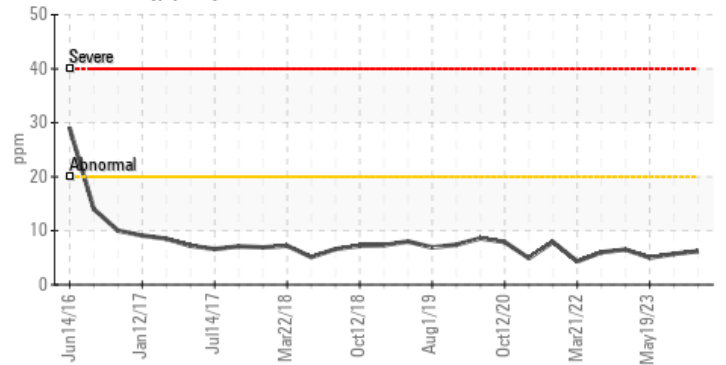
Chromium (ppm)



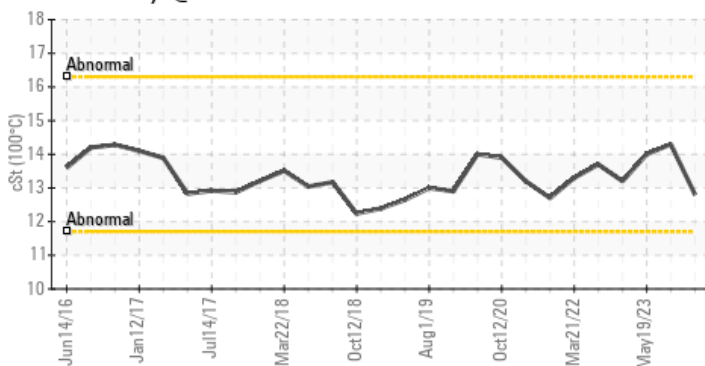
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

