



CONSTRUCTION EQUIPMENT

W07013376-1 AM HARDW VOLVO L90H 623857 - DIESEL ENGINE



Sample No: VCP418011
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W07013376-1 AM HARDW



SAMPLE INFORMATION

Sample Number	VCP418011	VCP386292	VCP340999	VCP319633
Sample Date	30 Aug 2023	20 Jan 2023	11 Mar 2022	10 Dec 2021
Machine Hours	12875	11675	9661	9121
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

McClung-Logan Virginia LLC- RICHMOND
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 GLEN ALLEN, VA
 US 23060
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 T:
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OIL CONDITION

Visc @ 100°C	cSt	13.5	13.9	13.7	12.9
Base Number (BN)	mg KOH/g	6.9	6.5	11.3	7.3
Oxidation (PA)	%	67	62	90	71



CONTAMINATION

Soot %	%	1	0.6	0.5	0.3
Nitration (PA)	%	85	72	71	60
Sulfation (PA)	%	65	58	66	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	8	5	6
Sodium	ppm	3	2	1	2
Potassium	ppm	1	2	1	0



WEAR METALS

Iron	ppm	17	9	8	8
Copper	ppm	2	1	<1	<1
Lead	ppm	0	1	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	6	5	4	4
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	80	93	41	40
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1710	1901	1887	1723
Magnesium	ppm	596	376	544	516
Zinc	ppm	1348	1400	1221	1143
Phosphorus	ppm	1123	1184	1009	969
Barium	ppm	0	0	0	0
Boron	ppm	51	158	46	40

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: VOLVO8882
Unique No: 10632415
Signed: Wes Davis
Report Date: 05 Sep 2023

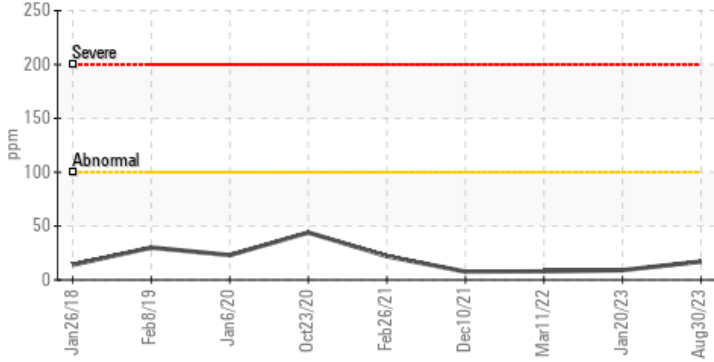


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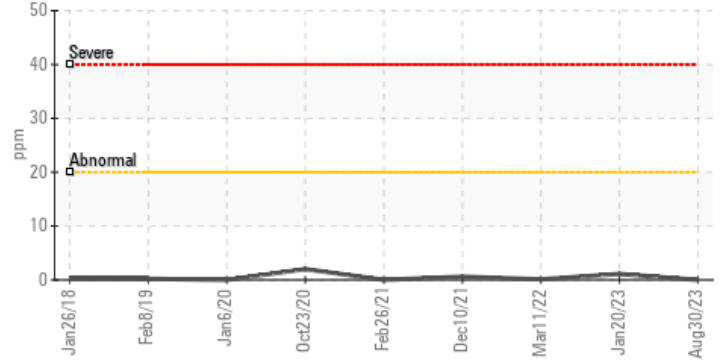


GRAPHS

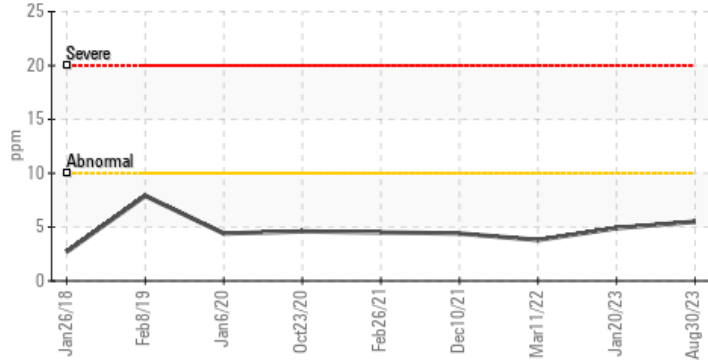
Iron (ppm)



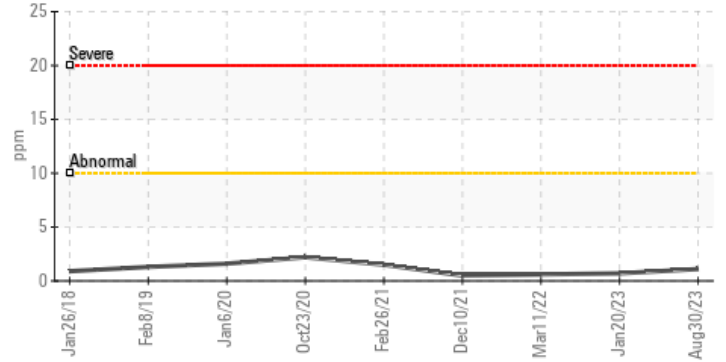
Lead (ppm)



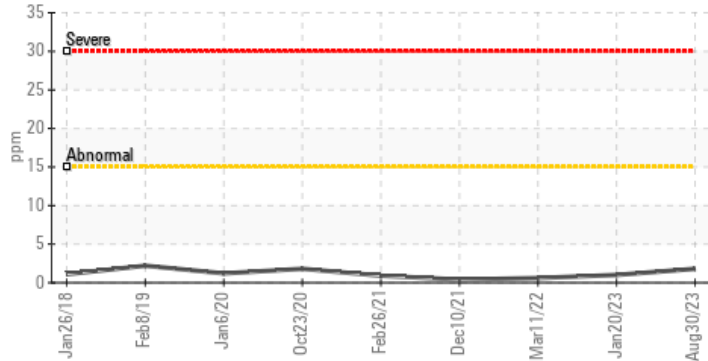
Aluminum (ppm)



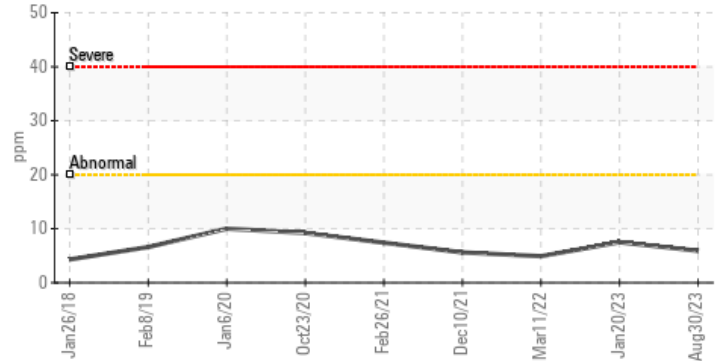
Chromium (ppm)



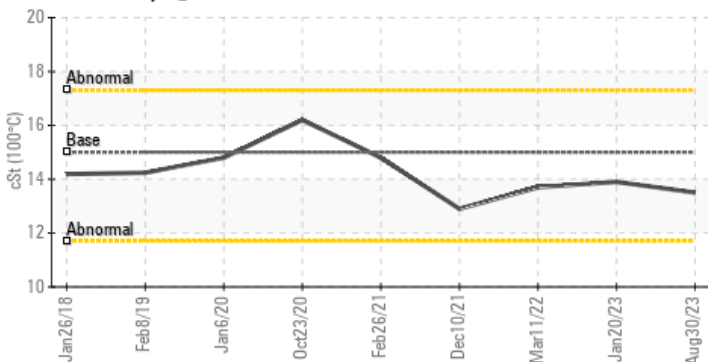
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

