



CONSTRUCTION EQUIPMENT

SPM661225 VOLVO L350H 1138 - DIESEL ENGINE



Sample No: VCP442829
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SPM661225



SAMPLE INFORMATION

Sample Number	VCP442829	VCP439742	VCP351473	VCP404845
Sample Date	30 Jan 2024	04 Oct 2023	11 Aug 2023	25 Apr 2023
Machine Hours	5328	4974	4582	3754
Oil Hours	0	0	0	500
Oil Changed	N/A	N/A	N/A	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ALTA EQUIPMENT

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 SYRACUSE, NY
 US 13206
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 F: (315)434-9471



OIL CONDITION

Visc @ 100°C	cSt	12.9	13.4	13.8	13.3
Base Number (BN)	mg KOH/g	10.2	9.9	9.2	9.9
Oxidation (PA)	%	80	82	87	81



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.5	0.6	1.3	0.7
Nitration (PA)	%	55	58	78	63
Sulfation (PA)	%	63	64	66	64
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	5	6	4
Sodium	ppm	2	2	3	1
Potassium	ppm	1	0	1	0



WEAR METALS

Iron	ppm	4	6	12	7
Copper	ppm	4	2	3	1
Lead	ppm	<1	<1	<1	0
Tin	ppm	<1	<1	1	0
Aluminum	ppm	1	8	4	1
Chromium	ppm	0	0	<1	0
Molybdenum	ppm	39	43	40	37
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1579	1707	1729	1586
Magnesium	ppm	475	566	540	477
Zinc	ppm	1098	1295	1225	1034
Phosphorus	ppm	918	994	952	803
Barium	ppm	0	0	0	0
Boron	ppm	35	38	20	33

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: VOLVO0142
Unique No: 10860029
Signed: Wes Davis
Report Date: 02 Feb 2024

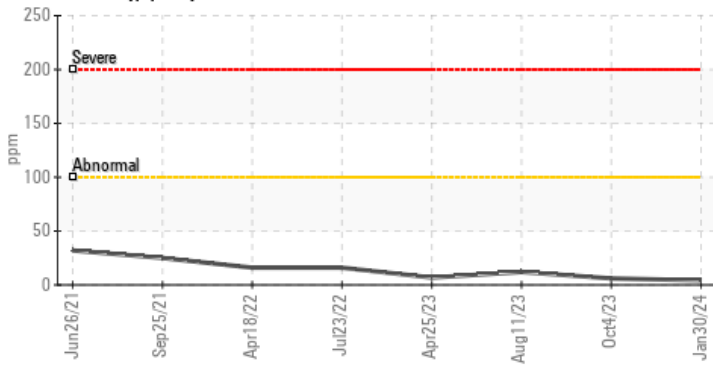


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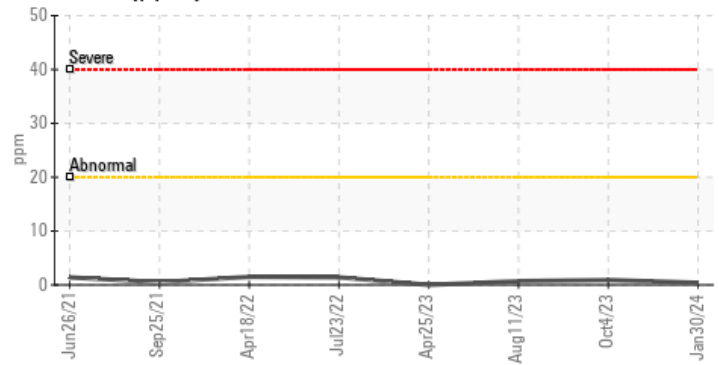


GRAPHS

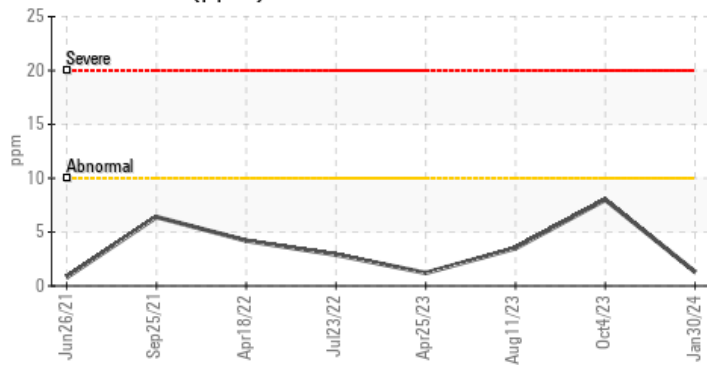
Iron (ppm)



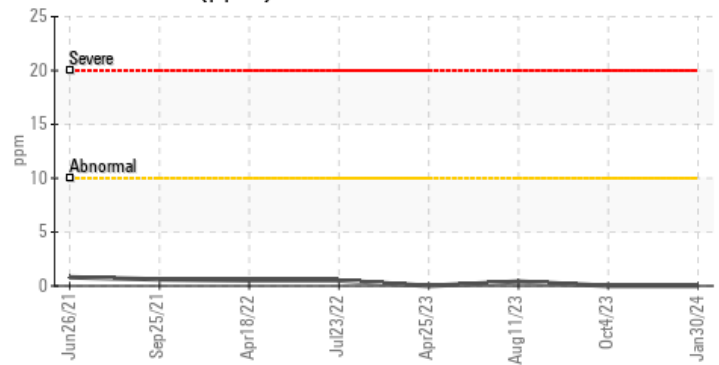
Lead (ppm)



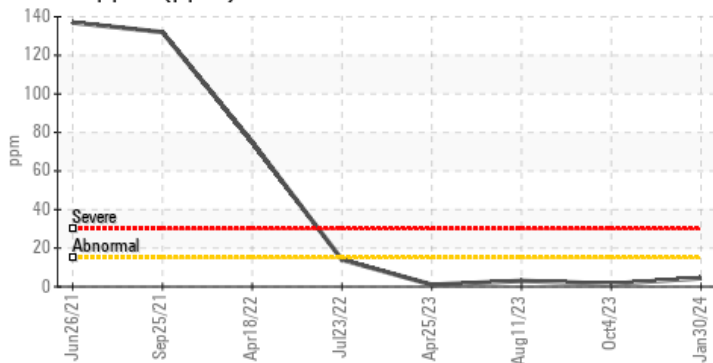
Aluminum (ppm)



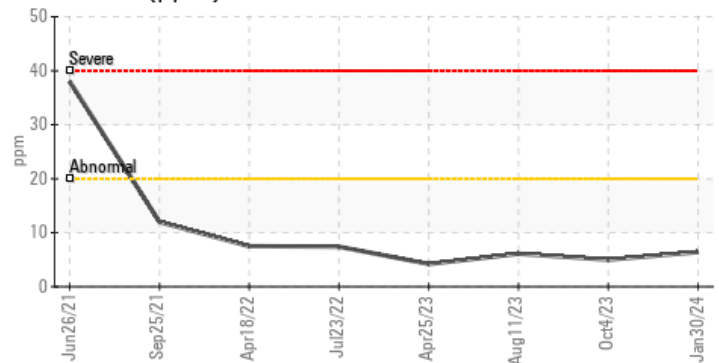
Chromium (ppm)



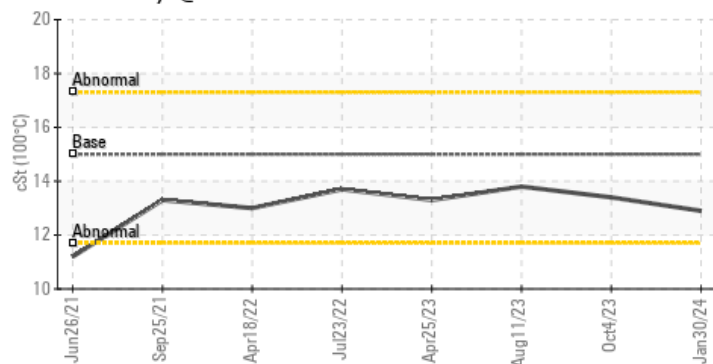
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

