



CONSTRUCTION EQUIPMENT

SW0067218 VOLVO A45G 352798 - DIESEL ENGINE



Sample No: VCP408629
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SWO067218



SAMPLE INFORMATION

Sample Number	VCP408629	VCP421509	VCP419903	VCP333393
Sample Date	06 Nov 2023	27 Jun 2023	24 Mar 2023	01 Nov 2022
Machine Hours	3530	3031	2640	2087
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.4	12.7	12.7	12.8
Base Number (BN)	mg KOH/g	10.2	10.7	10.1	11.7
Oxidation (PA)	%	80	81	80	84

CONTAMINATION

Soot %	%	0.3	0.2	0.3	0.3
Nitration (PA)	%	54	55	59	64
Sulfation (PA)	%	61	62	61	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	0.5	<1.0	<1.0	<1.0
Silicon	ppm	6	5	7	6
Sodium	ppm	1	2	2	2
Potassium	ppm	0	<1	0	0

WEAR METALS

Iron	ppm	3	5	7	8
Copper	ppm	0	<1	<1	1
Lead	ppm	0	<1	<1	1
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	2	3	2	2
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	39	43	44	43
Nickel	ppm	1	4	4	3
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	2	0
Manganese	ppm	<1	<1	1	<1
Vanadium	ppm	0	<1	0	0

ADDITIVES

Calcium	ppm	1612	1832	1820	1647
Magnesium	ppm	510	550	564	523
Zinc	ppm	1026	1091	1038	963
Phosphorus	ppm	855	897	867	761
Barium	ppm	0	0	0	0
Boron	ppm	45	52	54	44

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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: VOLVO8247
Unique No: 10740615
Signed: Wes Davis
Report Date: 16 Nov 2023

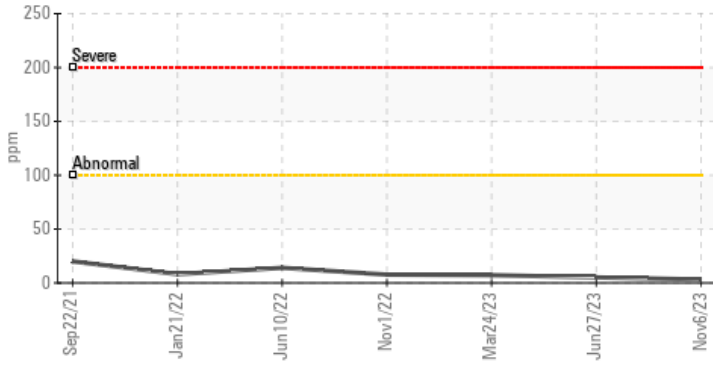


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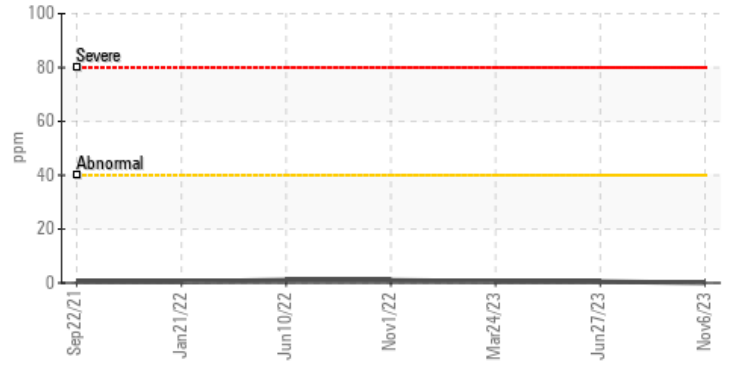


GRAPHS

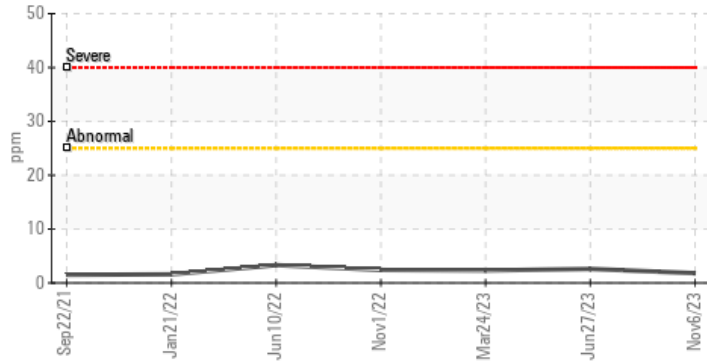
Iron (ppm)



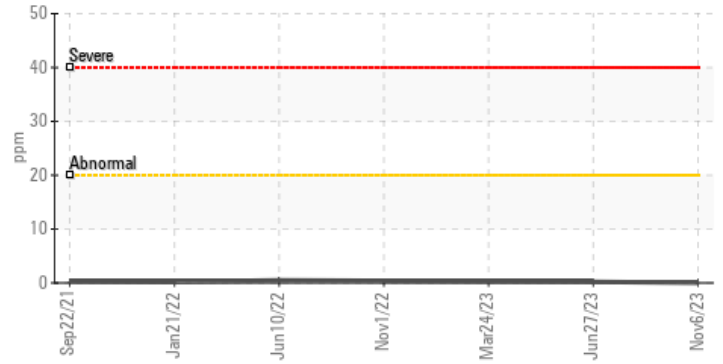
Lead (ppm)



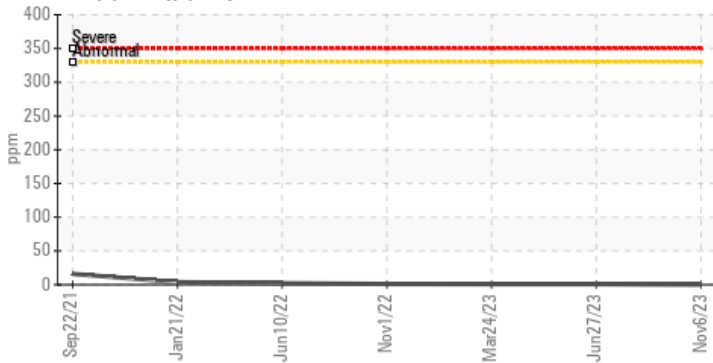
Aluminum (ppm)



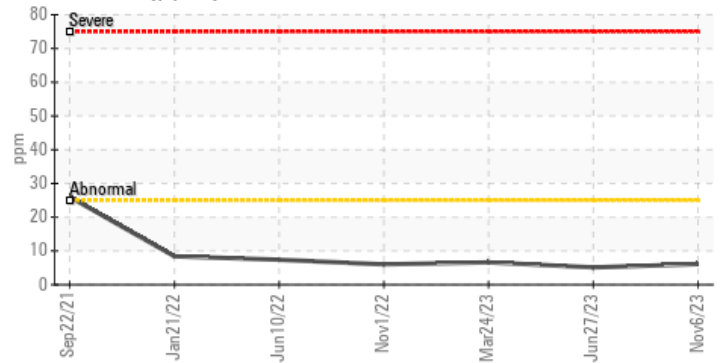
Chromium (ppm)



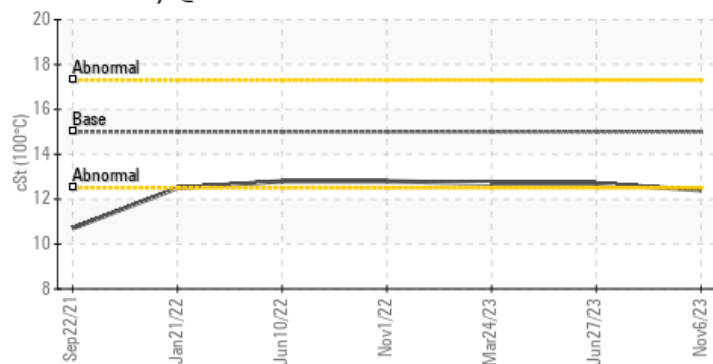
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

