



CONSTRUCTION EQUIPMENT

W05003704 VOLVO A45G 342686 - DIESEL ENGINE



Sample No: VCP418030
Oil Type: MOBIL 15W40
Job No: W05003704



SAMPLE INFORMATION

Sample Number	VCP418030	VCP419601	VCP395330	VCP385936
Sample Date	23 Jun 2023	04 May 2023	07 Mar 2023	25 Jan 2023
Machine Hours	5770	5443	5045	1799
Oil Hours	250	500	250	250
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.8	12.6	12.4	12.9
Base Number (BN)	mg KOH/g	8.7	8.9	9.6	9.2
Oxidation (PA)	%	65	65	63	58



CONTAMINATION

Soot %	%	0.2	0.1	0.1	0.1
Nitration (PA)	%	58	58	53	54
Sulfation (PA)	%	62	63	60	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	0.6	<1.0
Silicon	ppm	4	5	5	3
Sodium	ppm	2	2	2	1
Potassium	ppm	1	<1	0	0



WEAR METALS

Iron	ppm	2	4	2	3
Copper	ppm	0	<1	<1	3
Lead	ppm	0	<1	0	<1
Tin	ppm	0	<1	0	<1
Aluminum	ppm	<1	1	2	1
Chromium	ppm	0	<1	0	<1
Molybdenum	ppm	125	118	115	79
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1671	1489	1504	1267
Magnesium	ppm	654	625	645	937
Zinc	ppm	951	865	877	1231
Phosphorus	ppm	776	711	726	1031
Barium	ppm	0	0	0	0
Boron	ppm	351	347	259	72

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: VOLVO0002
Unique No: 10536782
Signed: Doug Bogart
Report Date: 02 Jul 2023

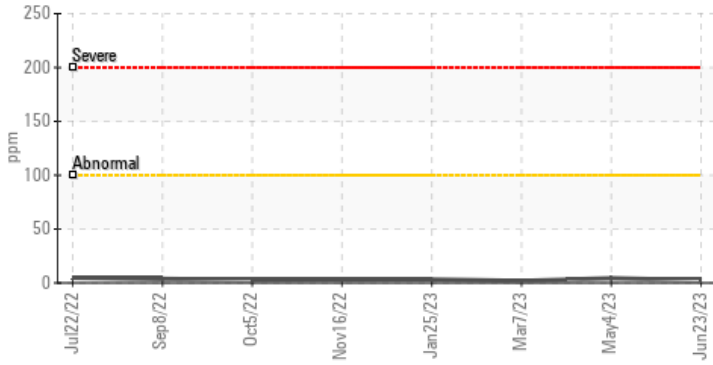


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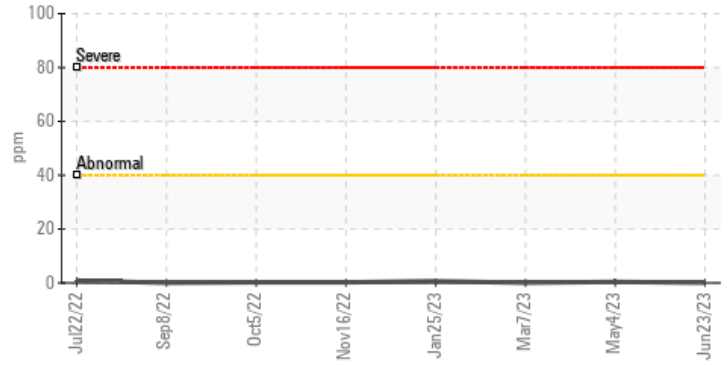


GRAPHS

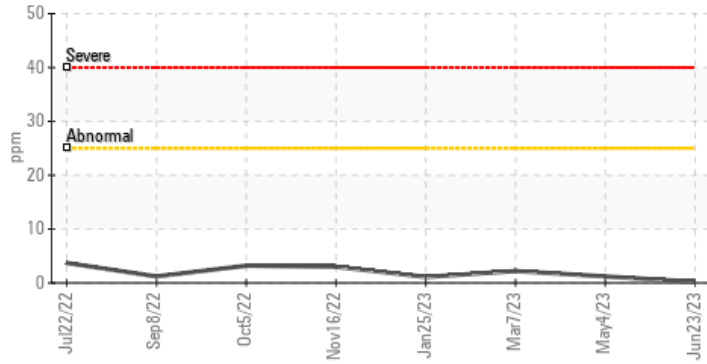
Iron (ppm)



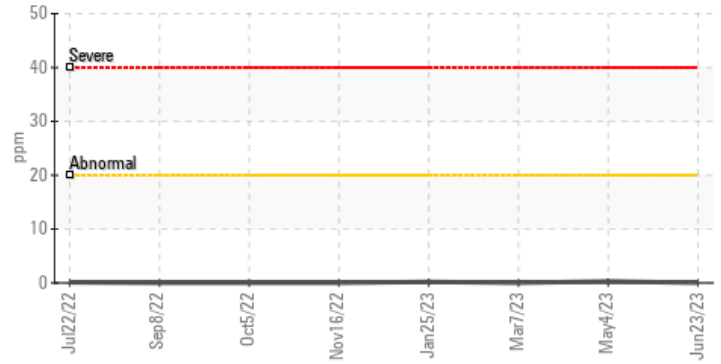
Lead (ppm)



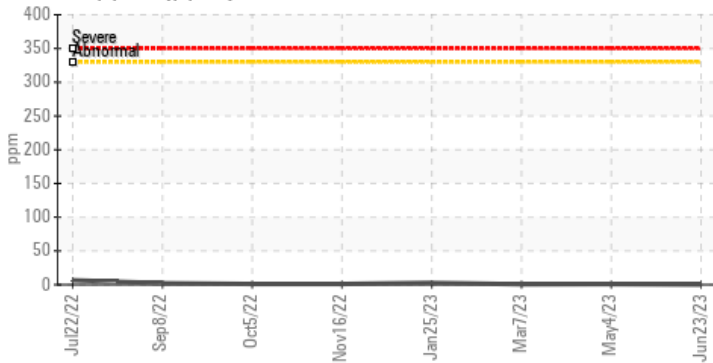
Aluminum (ppm)



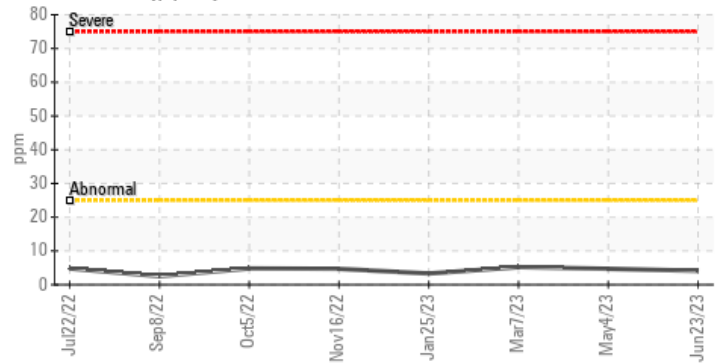
Chromium (ppm)



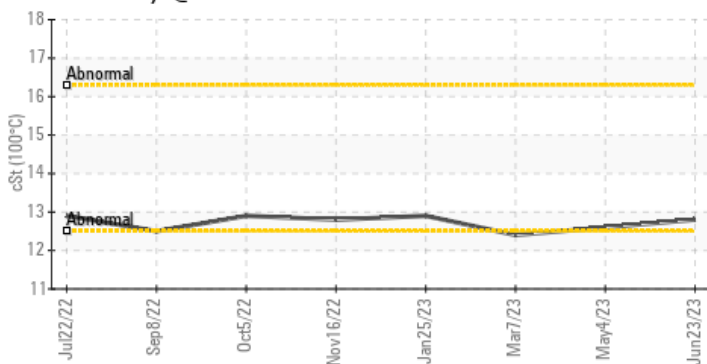
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

