



CONSTRUCTION EQUIPMENT

8973 VOLVO ECR88D 217540 - DIESEL ENGINE



Sample No: VCP423103
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 8973



SAMPLE INFORMATION

Sample Number	VCP423103	VCP386410	---	---
Sample Date	23 May 2023	27 Jan 2023	---	---
Machine Hours	1024	666	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	13.8	13.6	---	---
Base Number (BN)	mg KOH/g	7.7	6.2	---	---
Oxidation (PA)	%	73	73	---	---

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.



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.3	0.3	---	---
Nitration (PA)	%	68	83	---	---
Sulfation (PA)	%	64	62	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	7	11	---	---
Sodium	ppm	3	4	---	---
Potassium	ppm	1	<1	---	---



WEAR METALS

Iron	ppm	12	27	---	---
Copper	ppm	14	153	---	---
Lead	ppm	0	0	---	---
Tin	ppm	<1	1	---	---
Aluminum	ppm	4	4	---	---
Chromium	ppm	<1	1	---	---
Molybdenum	ppm	87	16	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	1	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	2	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	1437	2308	---	---
Magnesium	ppm	623	168	---	---
Zinc	ppm	1254	1056	---	---
Phosphorus	ppm	1031	853	---	---
Barium	ppm	0	2	---	---
Boron	ppm	254	9	---	---

Depot: VOLV00150
Unique No: 10492804
Signed: Wes Davis
Report Date: 29 May 2023

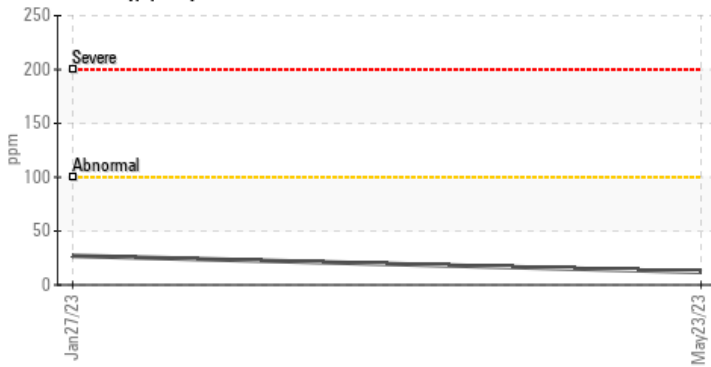


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GRAPHS

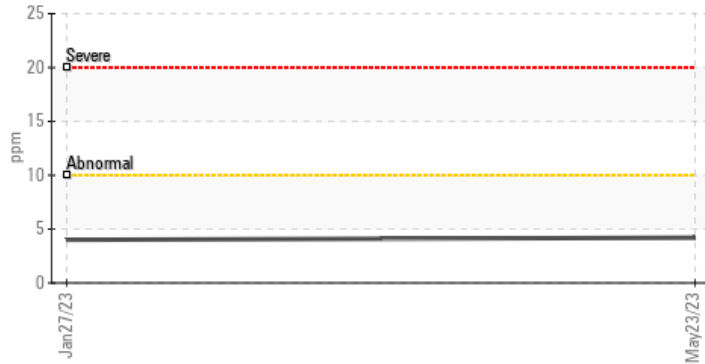
Iron (ppm)



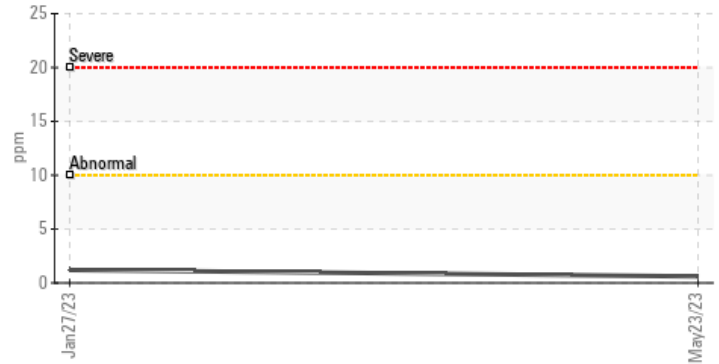
Lead (ppm)



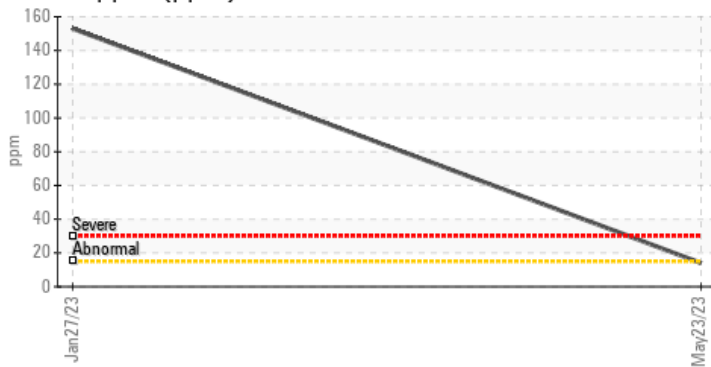
Aluminum (ppm)



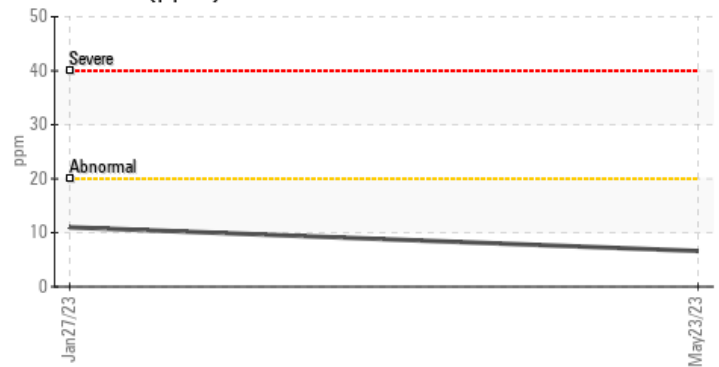
Chromium (ppm)



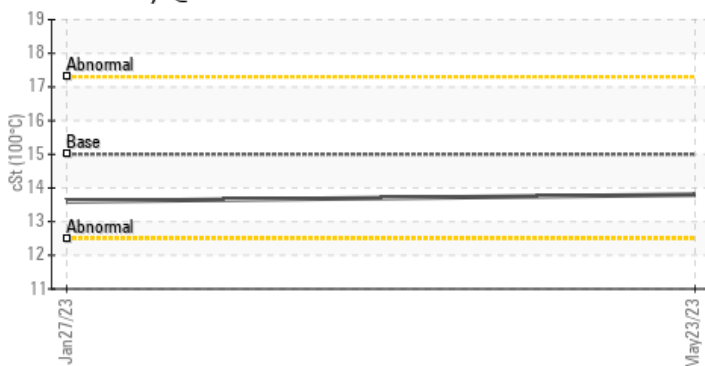
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

