



CONSTRUCTION EQUIPMENT

SW1035497 MGC VOLVO ECR88D 212999 - DIESEL ENGINE



Sample No: VCP442953
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1035497 MGC



SAMPLE INFORMATION

Sample Number	VCP442953	VCP369696	VCP324713	VCP249417
Sample Date	04 Jun 2024	14 Nov 2022	06 Jul 2021	16 Jul 2019
Machine Hours	3167	2588	2067	1006
Oil Hours	0	0	0	0
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.7	12.8	13.0	13.2
Base Number (BN)	mg KOH/g	7.9	10.7	---	---
Oxidation (PA)	%	70	90	92	87

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	NEG	NEG
Soot %	%	0.2	0.1	0.1	0.1
Nitration (PA)	%	74	73	70	62
Sulfation (PA)	%	55	66	67	62
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	8	6	7
Sodium	ppm	2	1	2	4
Potassium	ppm	2	0	<1	6

WEAR METALS

Iron	ppm	16	9	11	14
Copper	ppm	12	<1	1	2
Lead	ppm	0	0	0	0
Tin	ppm	<1	0	<1	0
Aluminum	ppm	3	2	0	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	62	43	40	39
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1166	1650	1568	1848
Magnesium	ppm	971	521	489	504
Zinc	ppm	1287	1093	1060	882
Phosphorus	ppm	1028	940	920	759
Barium	ppm	0	0	0	<1
Boron	ppm	5	35	60	42

Depot: VOLVO6174
Unique No: 11073563
Signed: Sean Felton
Report Date: 13 Jun 2024

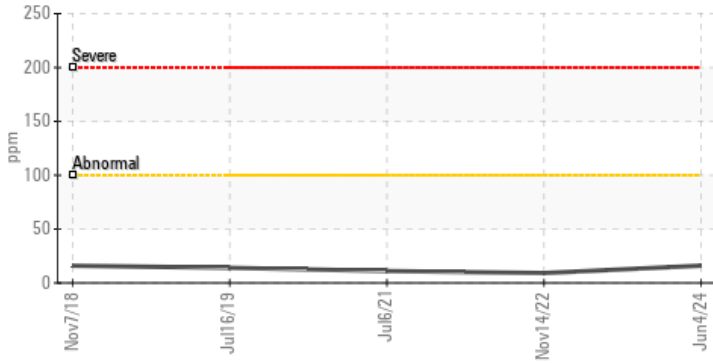


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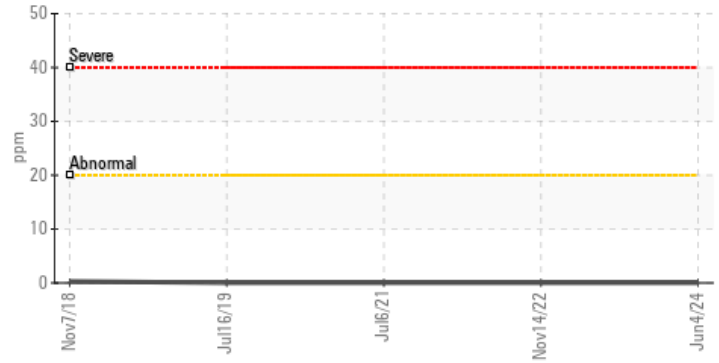


GRAPHS

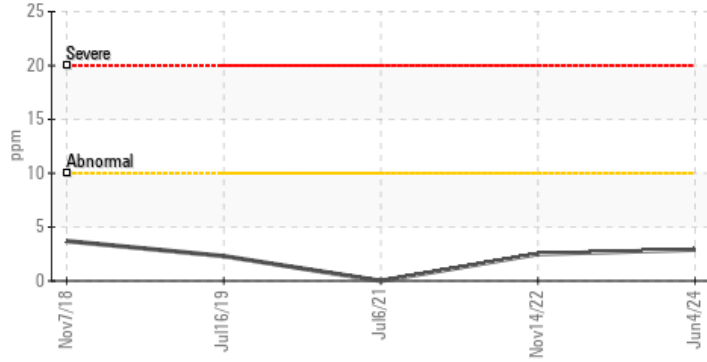
Iron (ppm)



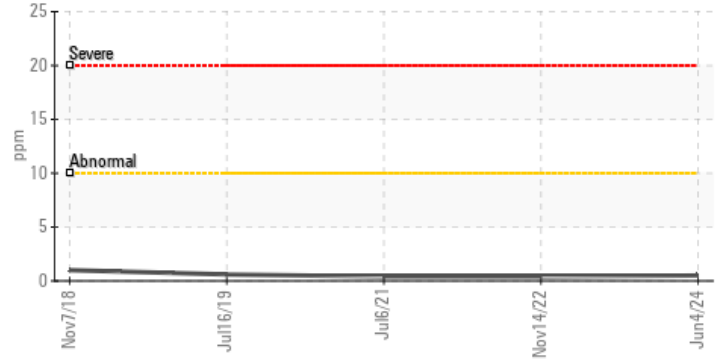
Lead (ppm)



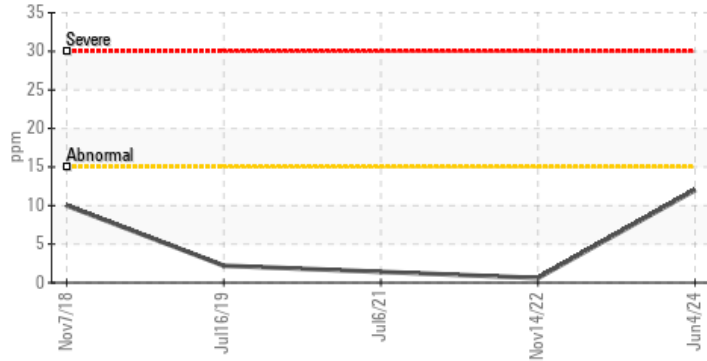
Aluminum (ppm)



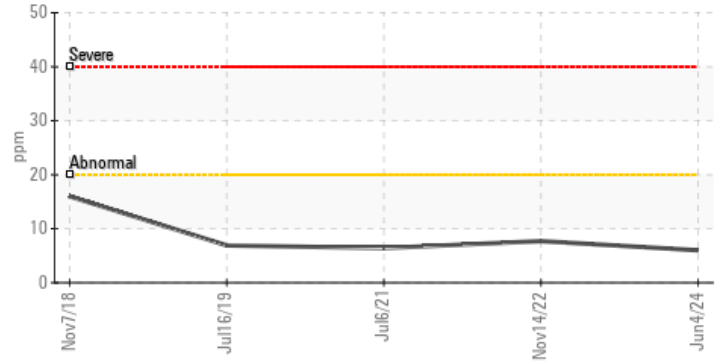
Chromium (ppm)



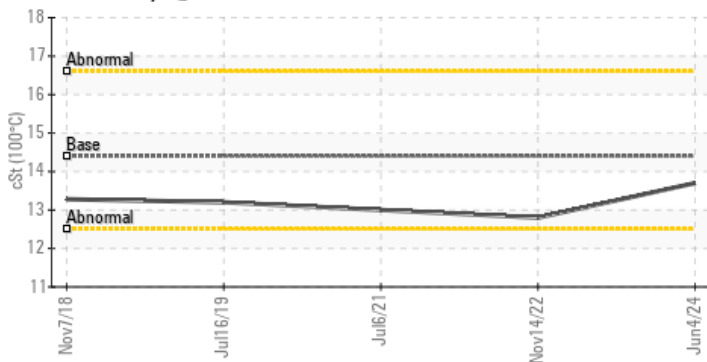
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

