



CONSTRUCTION EQUIPMENT

SW-27966-2 MAVERICK VOLVO A45G 352700 - DIESEL ENGINE



Sample No: VCP435877
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-27966-2 MAVERICK



SAMPLE INFORMATION

Sample Number	VCP435877	VCP430681	VCP418669	VCP406293
Sample Date	20 Dec 2023	12 Oct 2023	14 Jun 2023	10 Apr 2023
Machine Hours	5056	4590	4003	3671
Oil Hours	500	587	300	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.1	12.8	13.0	12.6
Base Number (BN)	mg KOH/g	7.8	8.8	9.2	7.7
Oxidation (PA)	%	57	58	64	60

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	0.3	0.2	0.4
Nitration (PA)	%	63	61	55	62
Sulfation (PA)	%	52	53	55	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	3	2	3
Sodium	ppm	1	3	2	0
Potassium	ppm	0	19	<1	0



WEAR METALS

Iron	ppm	4	7	3	9
Copper	ppm	<1	5	2	3
Lead	ppm	<1	<1	0	0
Tin	ppm	1	<1	0	0
Aluminum	ppm	2	1	10	1
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	69	64	62	60
Nickel	ppm	0	0	0	<1
Titanium	ppm	<1	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1488	1171	1200	1238
Magnesium	ppm	782	1025	945	875
Zinc	ppm	1334	1353	1285	1228
Phosphorus	ppm	1114	1083	1031	1023
Barium	ppm	<1	0	0	0
Boron	ppm	34	2	9	30

Depot: VOLVO8770
Unique No: 10808090
Signed: Wes Davis
Report Date: 02 Jan 2024

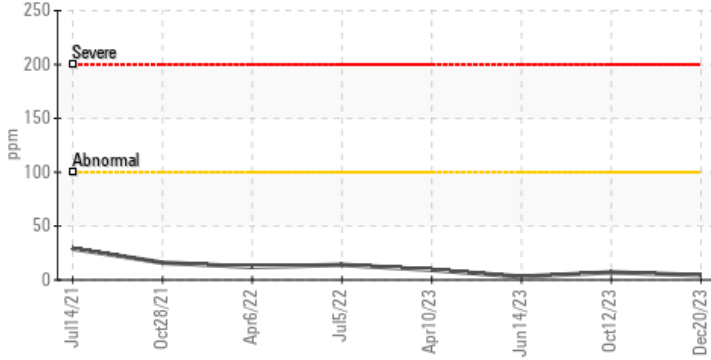


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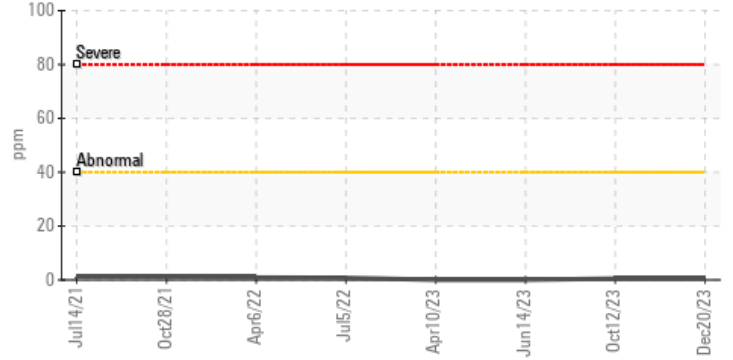


GRAPHS

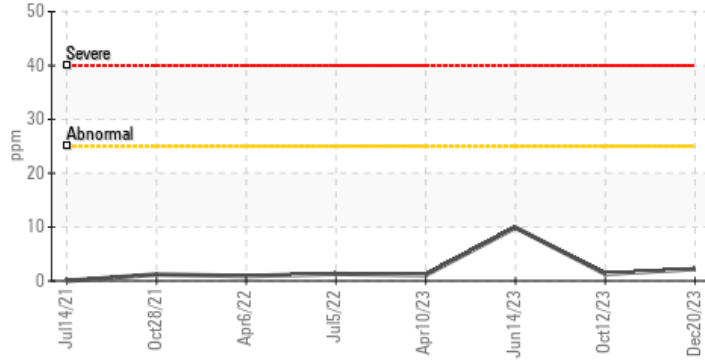
Iron (ppm)



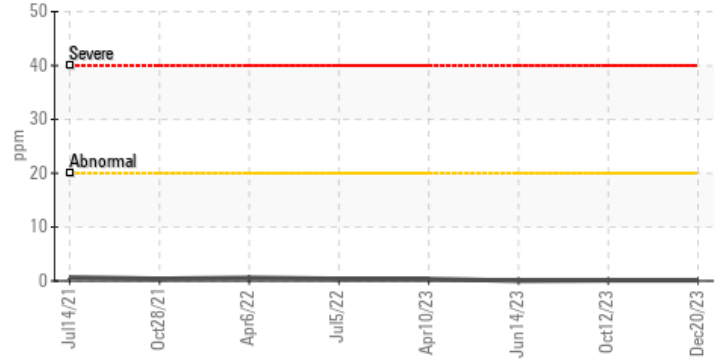
Lead (ppm)



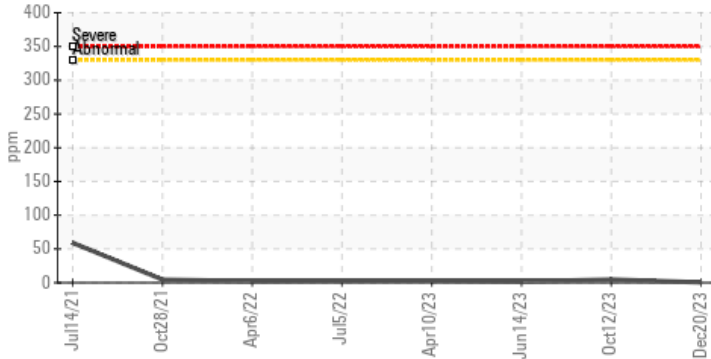
Aluminum (ppm)



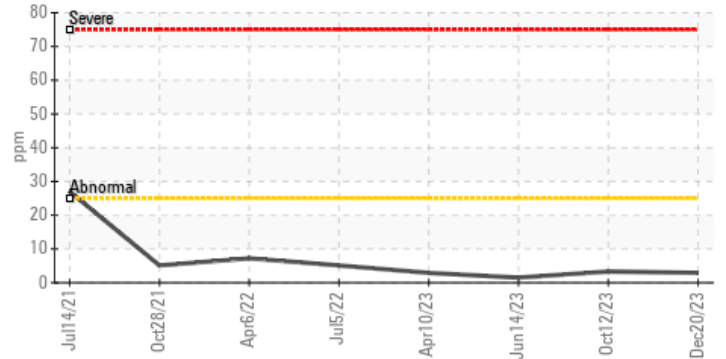
Chromium (ppm)



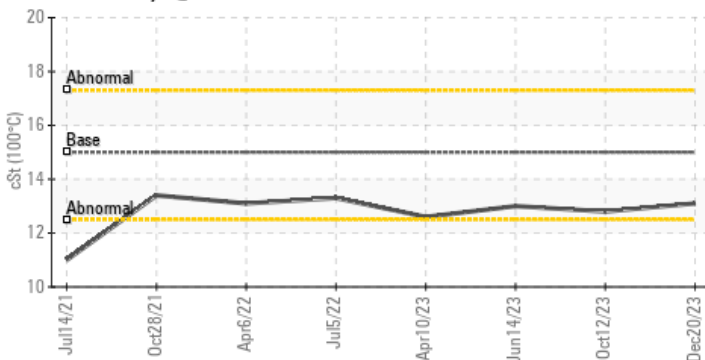
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

