MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CATERPILLAR HD 501 (S/N CGE57513)
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

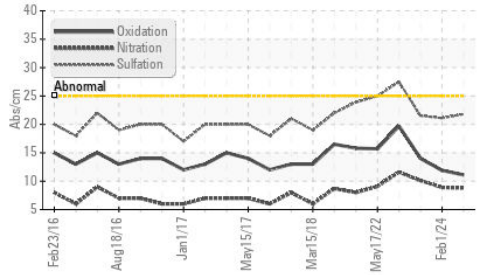
There is no indication of any contamination in the oil.

FLUID CONDITION

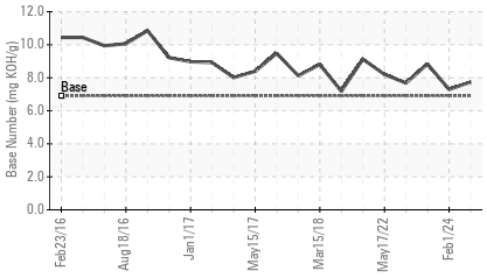
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0005098	RW0005102	RW0004604
Sample Date		Client Info		10 May 2024	01 Feb 2024	29 Nov 2023
Machine Age	hrs	Client Info		9906	9309	8907
Oil Age	hrs	Client Info		500	416	457
Filter Age	hrs	Client Info		500	416	457
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	15	8	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	4	3
Potassium	ppm	ASTM D5185m	>20	1	1	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.4	2	2.2
Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.9	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	21.1	21.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		0	<1	3
Boron	ppm	ASTM D5185m	39	0	6	32
Barium	ppm	ASTM D5185m	1	0	0	0
Molybdenum	ppm	ASTM D5185m	49	2	12	56
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	616	31	12	17
Calcium	ppm	ASTM D5185m	1554	2557	2359	2308
Phosphorus	ppm	ASTM D5185m	899	972	993	1021
Zinc	ppm	ASTM D5185m	1069	1220	1195	1228
Sulfur	ppm	ASTM D5185m	2624	4375	3903	4049
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.1	11.9	14.0
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	7.74	7.29	8.83
Visc @ 100°C	cSt	ASTM D445	13.6	14.8	14.8	14.8

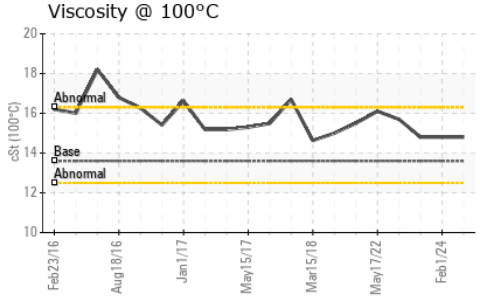
FT-IR (Direct Trend)



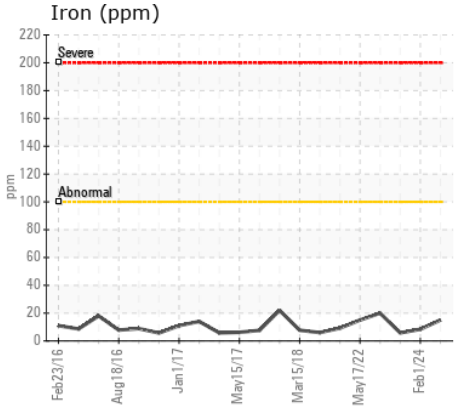
Base Number



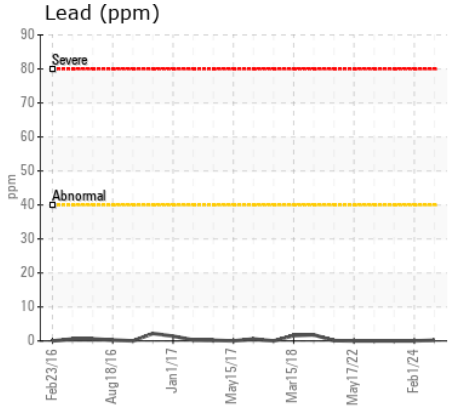
Viscosity @ 100°C



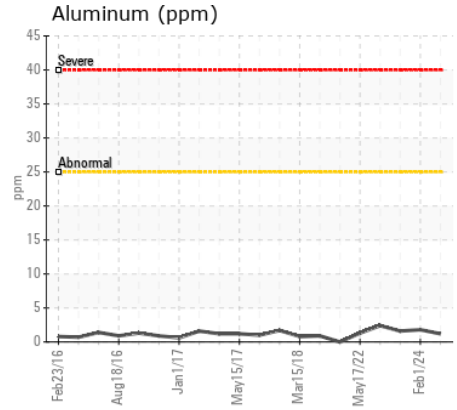
Iron (ppm)



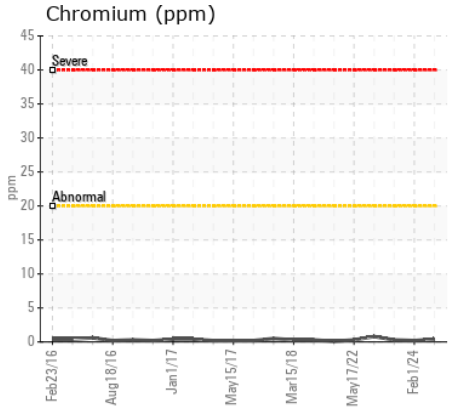
Lead (ppm)



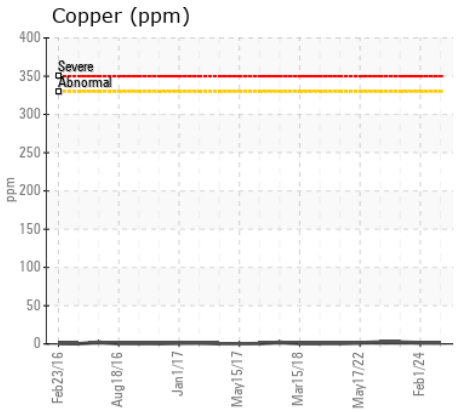
Aluminum (ppm)



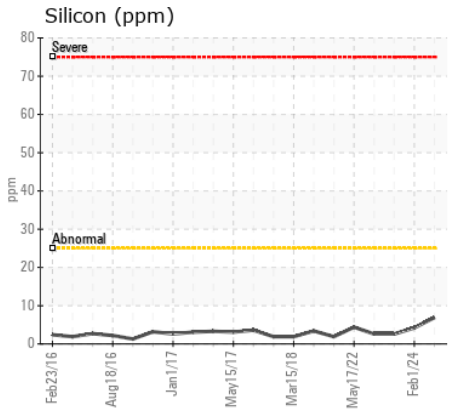
Chromium (ppm)



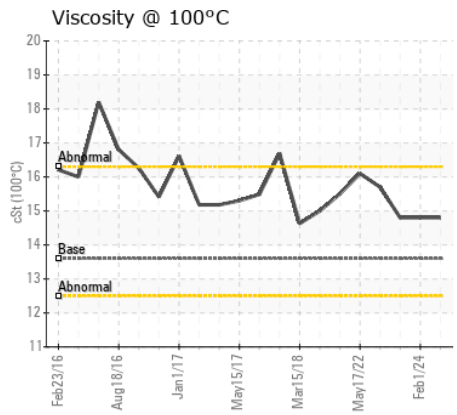
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



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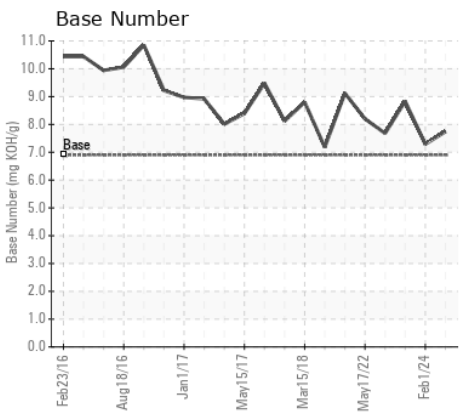

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005098
Lab Number : 06196022
Unique Number : 11058145
Test Package : MOB 2

Received : 30 May 2024
Tested : 02 Jun 2024
Diagnosed : 02 Jun 2024 - Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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