MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JENBACHER GM03 (S/N 1144731)
Component
Biogas Engine
Fluid
MAHLER Q8 Mahler G8 SAE 40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The iron level is abnormal. All other component wear rates are normal.

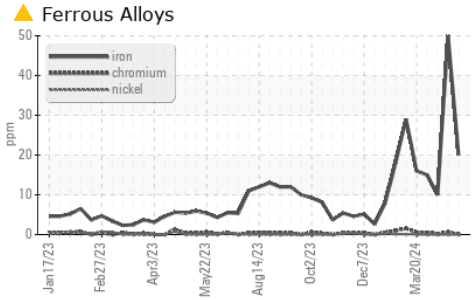
CONTAMINATION

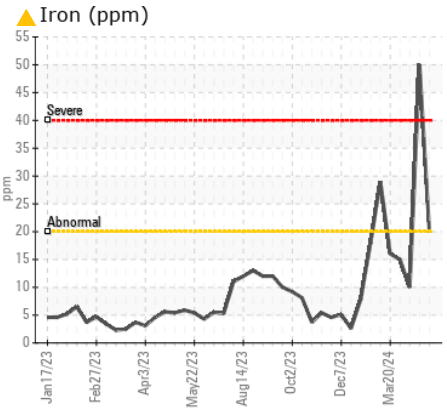
There is no indication of any contamination in the oil.

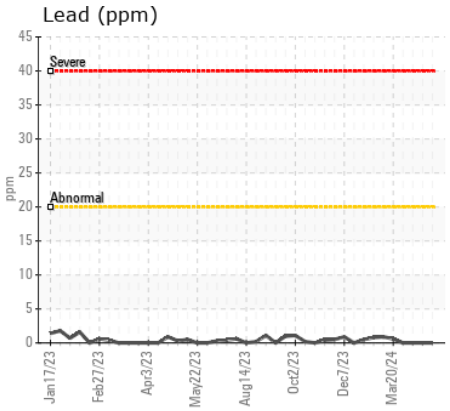
FLUID CONDITION

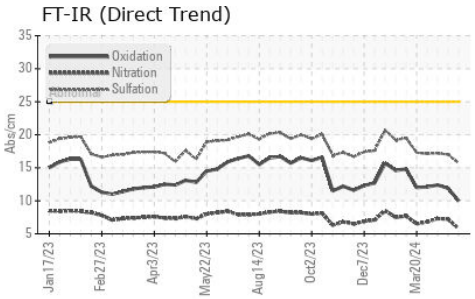
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

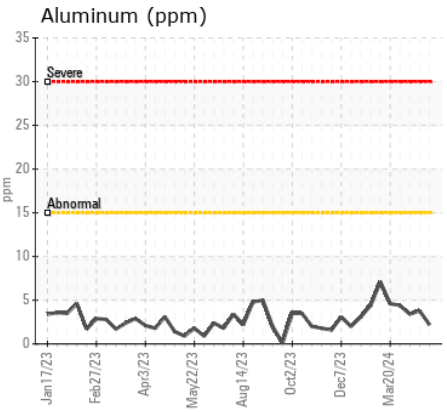
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0880435	WC0880429	WC0880426
Sample Date		Client Info		19 Apr 2024	12 Apr 2024	04 Apr 2024
Machine Age	hrs	Client Info		51141	50992	50871
Oil Age	hrs	Client Info		26	465	344
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>20	▲ 20	▲ 50	10
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	4	3
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>15	0	1	2
Tin	ppm	ASTM D5185m	>5	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>200	13	31	45
Potassium	ppm	ASTM D5185m	>20	0	0	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>2	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.8	7.2	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.7	17.0	17.2
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	>.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>20	1	2	<1
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		8	4	9
Calcium	ppm	ASTM D5185m		2296	2255	2353
Phosphorus	ppm	ASTM D5185m		399	354	421
Zinc	ppm	ASTM D5185m		451	380	487
Sulfur	ppm	ASTM D5185m		2526	2235	2794
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.0	11.9	12.4
Acid Number (AN)	mg KOH/g	ASTM D8045		0.946	0.46	0.42
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	7.63	8.01	7.55
Visc @ 100°C	cSt	ASTM D445	13.2	12.9	13.2	13.3

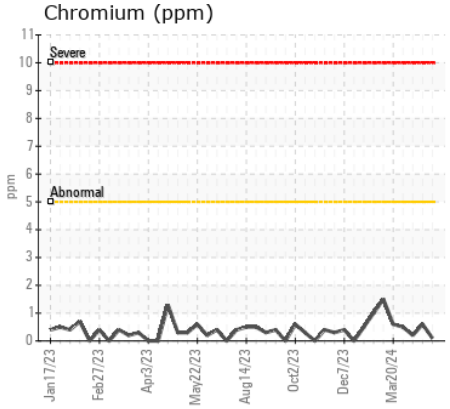


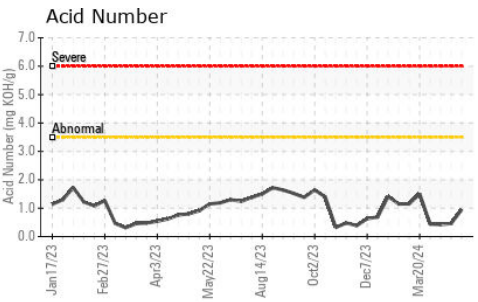


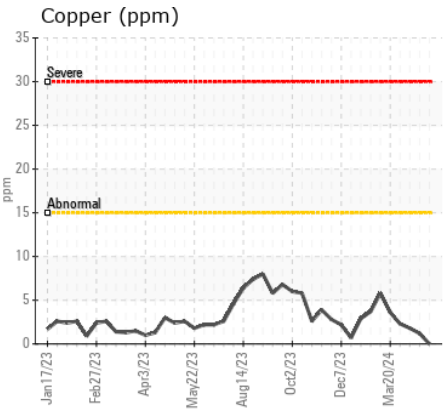


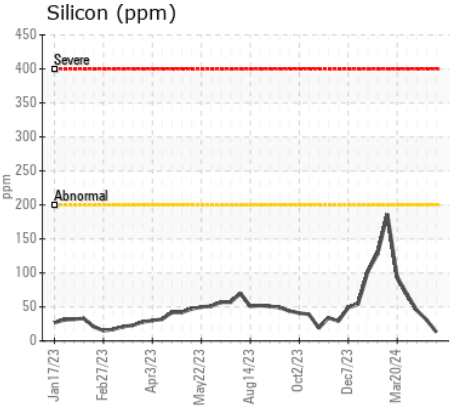


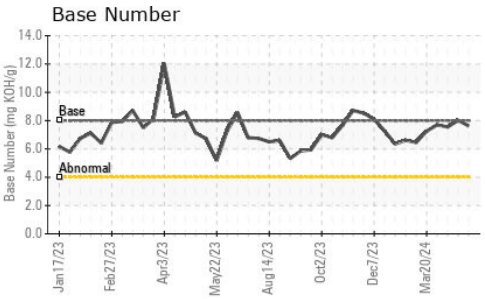


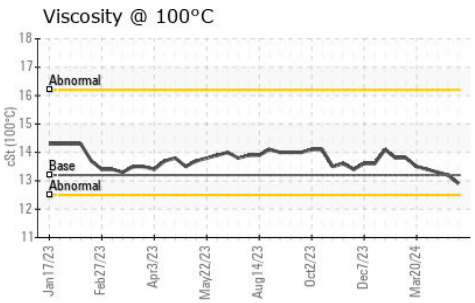


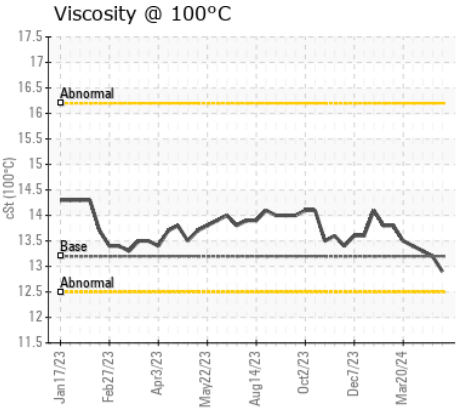


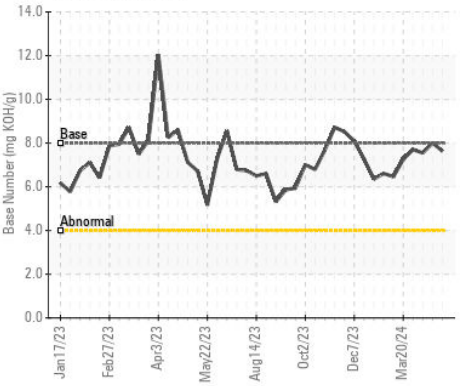












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0880435
Lab Number : 06157088
Unique Number : 10992511
Test Package : MOB 2

Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 25 Apr 2024 - Jonathan Hester

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T:
F:

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)