MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
1
Component
Biogas Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

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

CONTAMINATION

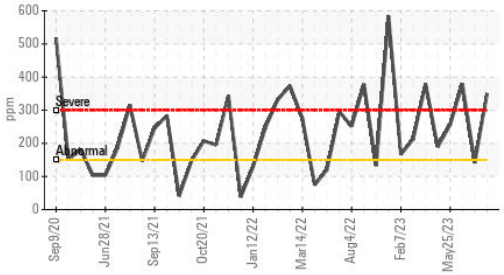
Sodium and/or potassium levels are high. Elemental level of silicon (Si) above normal.

FLUID CONDITION

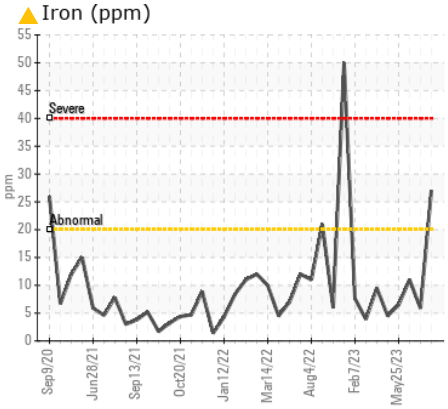
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0602745	WC0602739	WC0602756
Sample Date		Client Info		08 Jan 2024	21 Aug 2023	06 Jun 2023
Machine Age	hrs	Client Info		0	17746	16199
Oil Age	hrs	Client Info		1000	191	842
Filter Age	hrs	Client Info		1000	191	842
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				SEVERE	NORMAL	SEVERE
Iron	ppm	ASTM D5185m	>20	▲ 27	6	11
Chromium	ppm	ASTM D5185m	>5	1	<1	1
Nickel	ppm	ASTM D5185m	>2	2	0	<1
Titanium	ppm	ASTM D5185m		43	46	44
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>15	4	2	6
Lead	ppm	ASTM D5185m	>20	4	<1	1
Copper	ppm	ASTM D5185m	>15	5	1	3
Tin	ppm	ASTM D5185m	>5	4	2	▲ 6
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>150	⬢ 350	141	⬢ 379
Potassium	ppm	ASTM D5185m	>20	▲ 100	6	6
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.8	5.5	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.2	20.7	21.9
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	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		36	5	5
Boron	ppm	ASTM D5185m		62	148	83
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		10	11	16
Calcium	ppm	ASTM D5185m		1339	1472	1455
Phosphorus	ppm	ASTM D5185m		338	345	323
Zinc	ppm	ASTM D5185m		2	21	25
Sulfur	ppm	ASTM D5185m		1762	1671	1678
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.3	16.8	19.5
Acid Number (AN)	mg KOH/g	ASTM D8045		1.51	0.63	1.09
Base Number (BN)	mg KOH/g	ASTM D2896		3.18	5.08	4.10
Visc @ 100°C	cSt	ASTM D445		14.0	13.4	14.0

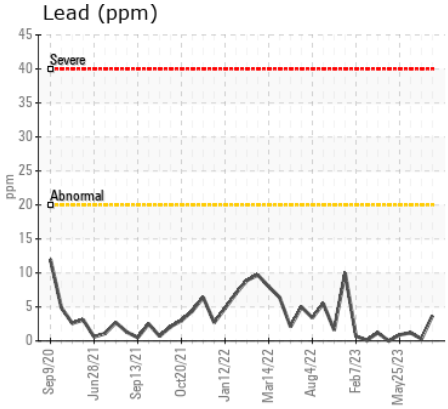
Silicon (ppm)



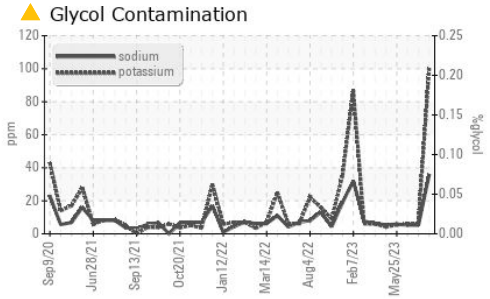
Iron (ppm)



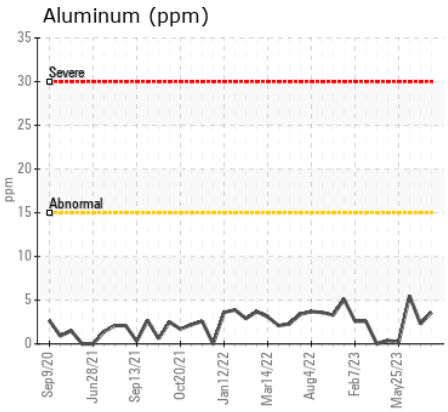
Lead (ppm)



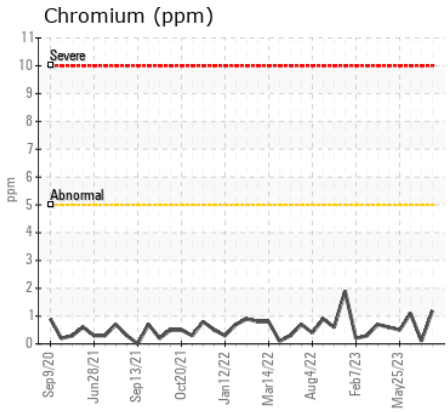
Glycol Contamination



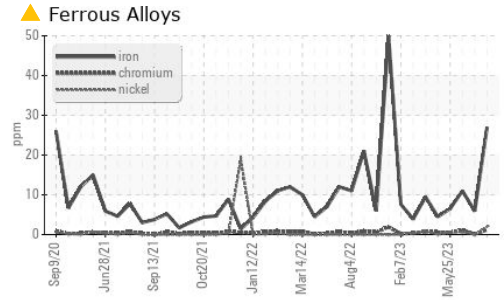
Aluminum (ppm)



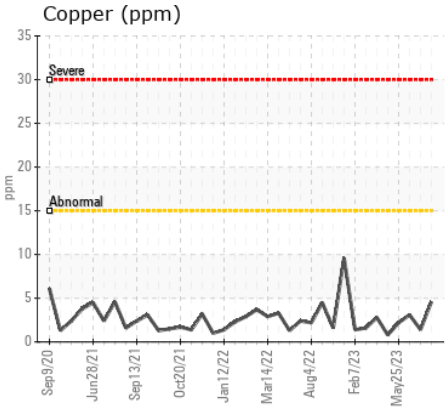
Chromium (ppm)



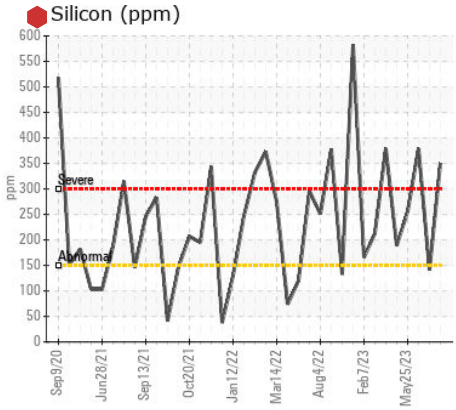
Ferrous Alloys



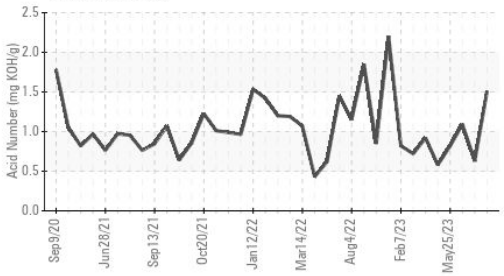
Copper (ppm)



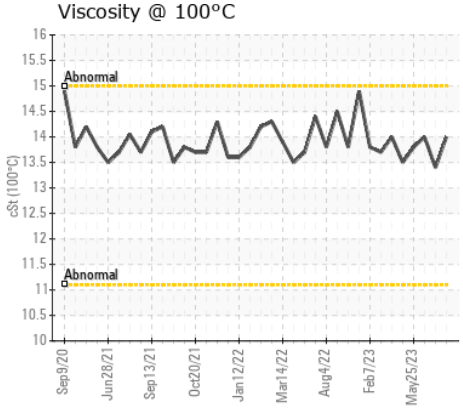
Silicon (ppm)



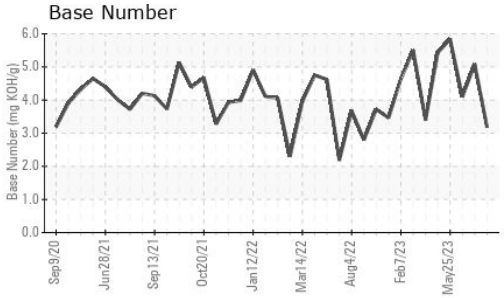
Acid Number



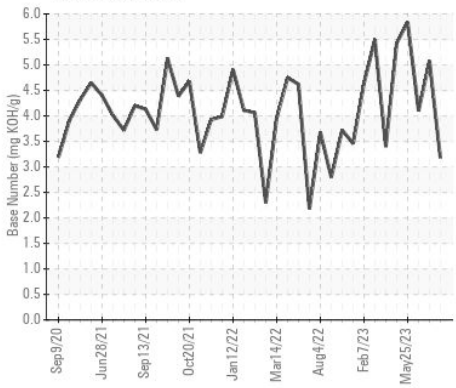
Viscosity @ 100°C



Base Number



Base Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: WC0602745	**Recieved**	: 12 Jan 2024
Lab Number	: 06059423	**Diagnosed**	: 16 Jan 2024
Unique Number	: 10830805	**Diagnostician**	: Jonathan Hester
Test Package	: MOB 2		

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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