



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**WVTM01BE**  
Component  
**Biogas Engine**  
Fluid  
**MOBIL Pegasus™ 605 Ultra 40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0839332</b>	WC0839329	WC0839325
Sample Date		Client Info		<b>02 Jul 2024</b>	06 May 2024	26 Apr 2024
Machine Age	hrs	Client Info		<b>117297</b>	115972	115762
Oil Age	hrs	Client Info		<b>591</b>	302	930
Filter Age	hrs	Client Info		<b>0</b>	302	930
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

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

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>14	<b>11</b>	6	2
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>8	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185m	>5	<b>3</b>	3	<1
Tin	ppm	ASTM D5185m	>3	<b>▲ 5</b>	4	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

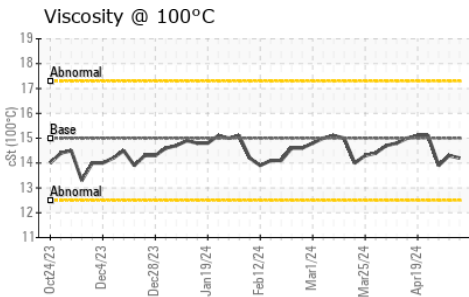
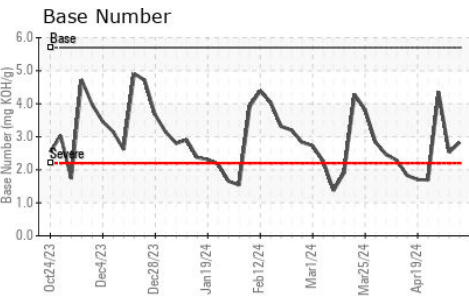
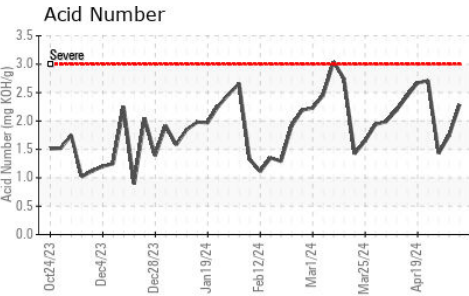
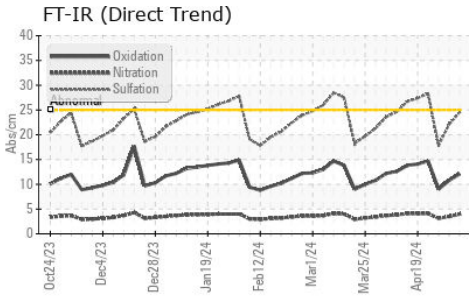
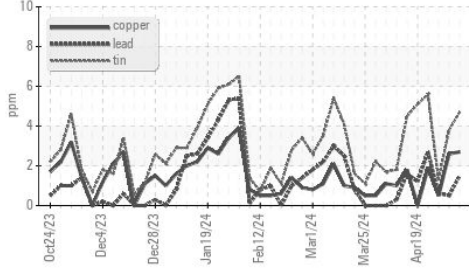
Silicon	ppm	ASTM D5185m	>180	<b>179</b>	118	43
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	1
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method		<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624		<b>4.0</b>	3.5	3.1
Sulfation	Abs/.1mm	*ASTM D7415		<b>24.5</b>	22.1	17.8
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

## FLUID CONDITION

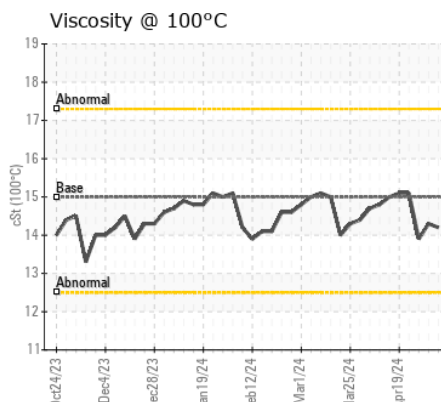
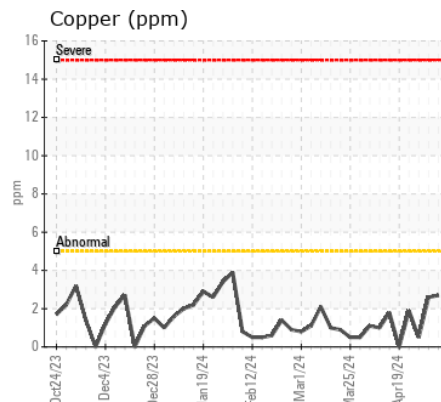
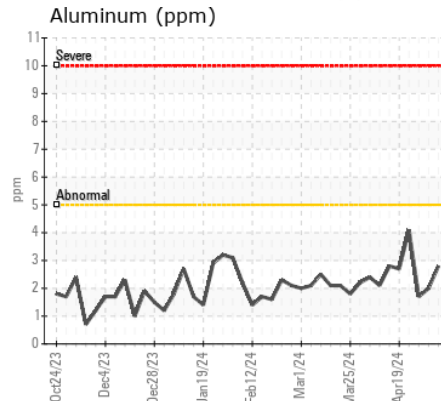
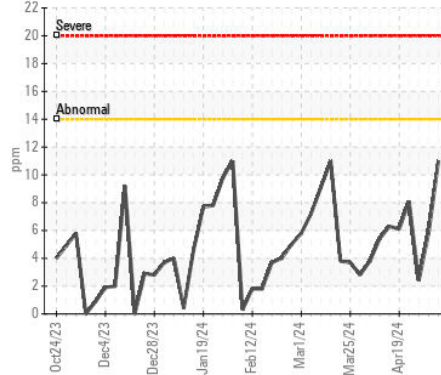
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Boron	ppm	ASTM D5185m		<b>39</b>	51	119
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>9</b>	4	4
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>60</b>	32	26
Calcium	ppm	ASTM D5185m		<b>1674</b>	1612	1531
Phosphorus	ppm	ASTM D5185m		<b>407</b>	383	432
Zinc	ppm	ASTM D5185m		<b>635</b>	552	533
Sulfur	ppm	ASTM D5185m		<b>4850</b>	5301	4296
Oxidation	Abs/.1mm	*ASTM D7414		<b>12.1</b>	10.8	9.0
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>2.29</b>	1.74	1.43
Base Number (BN)	mg KOH/g	ASTM D2896	5.7	<b>2.83</b>	2.53	4.35
Visc @ 100°C	cSt	ASTM D445	15	<b>14.2</b>	14.3	13.9

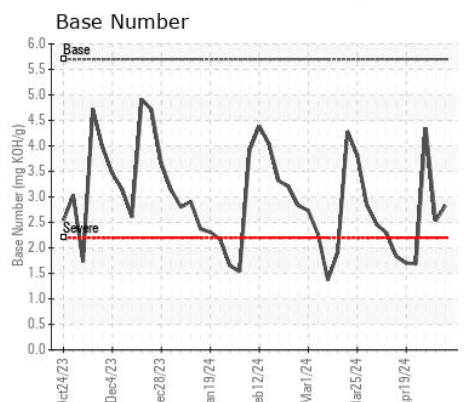
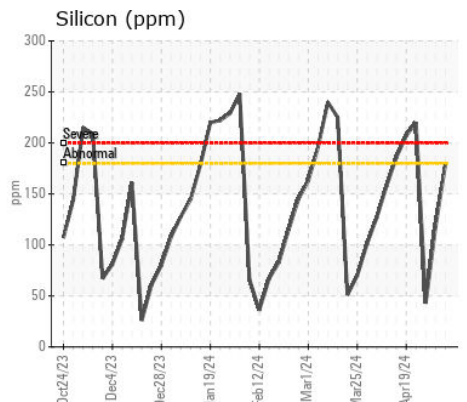
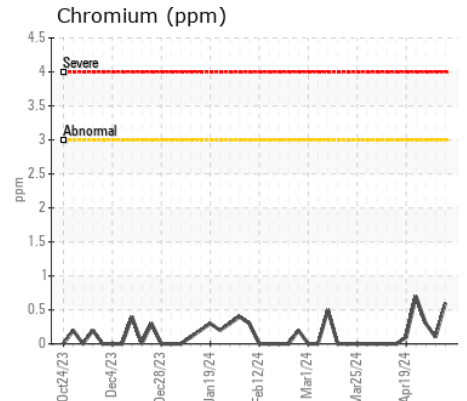
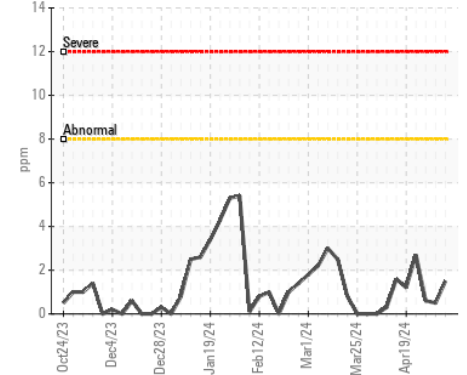
▲ Non-ferrous Metals



Iron (ppm)



Lead (ppm)



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0839332

Lab Number : 06230358

Unique Number : 11113851

Test Package : MOB 2 ( Additional Tests: PQ )

Received : 08 Jul 2024

Tested : 09 Jul 2024

Diagnosed : 10 Jul 2024 - Jonathan Hester

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)

EDL NA Recips-Watervliet

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