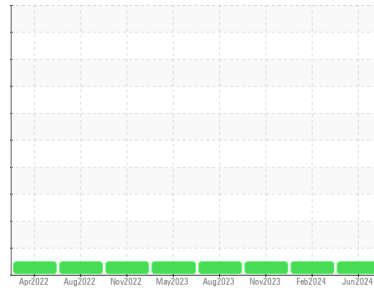




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
CARES Biogas Engine
 Component
Biogas Engine
 Fluid
MOBIL PEGASUS 610 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0946355	WC0584148	WC0584147
Sample Date	Client Info			27 Jun 2024	15 Feb 2024	13 Nov 2023
Machine Age	hrs	Client Info		68873	66749	64763
Oil Age	hrs	Client Info		2124	1986	1573
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>45	5	5	4
Chromium	ppm	ASTM D5185(m)	>2	<1	0	0
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>10	6	4	4
Lead	ppm	ASTM D5185(m)	>5	2	2	<1
Copper	ppm	ASTM D5185(m)	>14	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>13	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

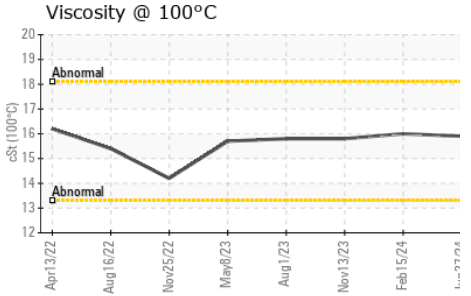
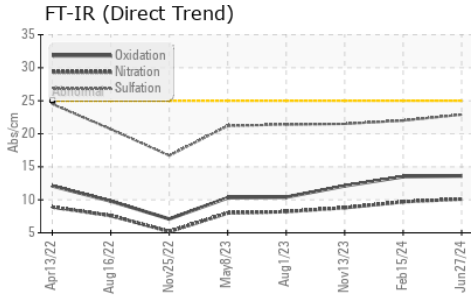
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		36	41	44
Barium	ppm	ASTM D5185(m)		<1	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)		11	9	9
Calcium	ppm	ASTM D5185(m)		3739	3667	3735
Phosphorus	ppm	ASTM D5185(m)		2	1	5
Zinc	ppm	ASTM D5185(m)		3	4	8
Sulfur	ppm	ASTM D5185(m)		4639	4777	4834
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>200	7	7	6
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.1	9.7	8.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	22.0	21.5



OIL ANALYSIS REPORT

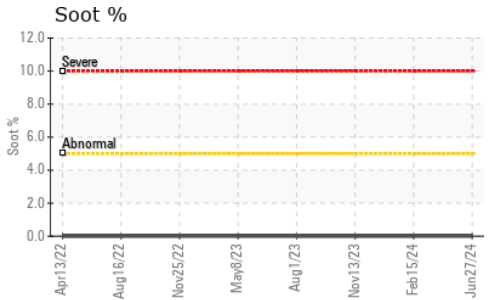
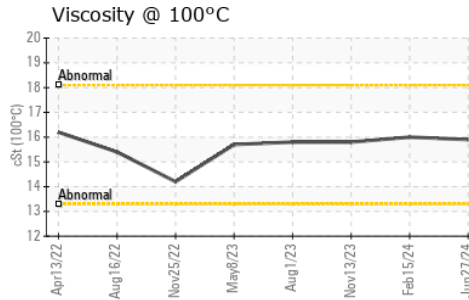
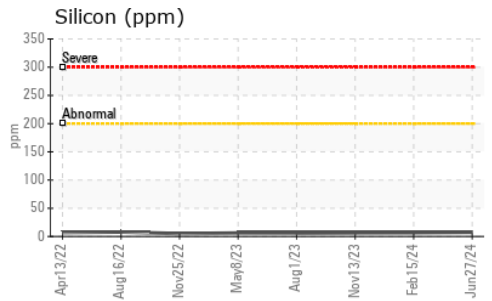
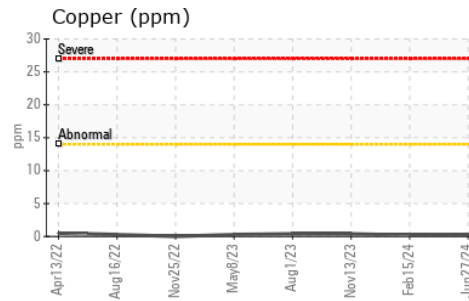
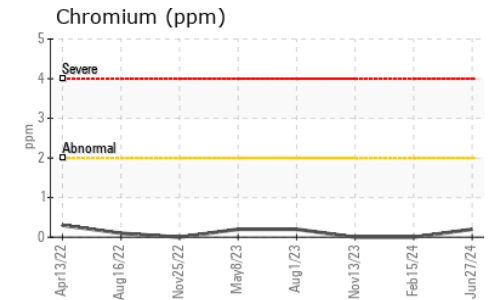
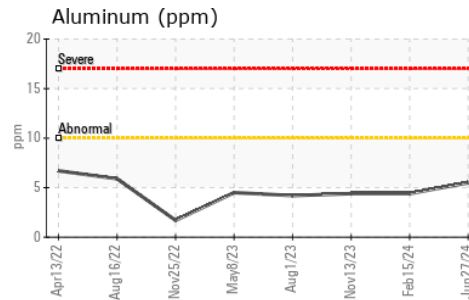
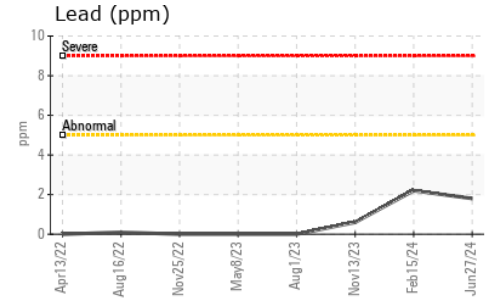
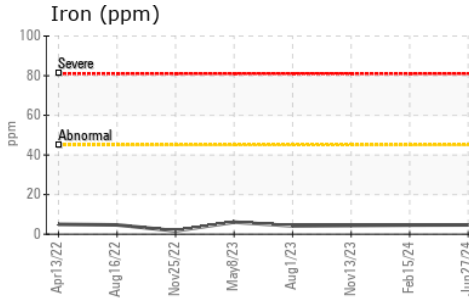


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	13.6	13.5	12.1

VISUAL	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.9	16.0	15.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0946355 **Received** : 03 Jul 2024
Lab Number : 02645240 **Tested** : 03 Jul 2024
Unique Number : 5802779 **Diagnosed** : 03 Jul 2024 - Kevin Marson
Test Package : MOB 1

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.