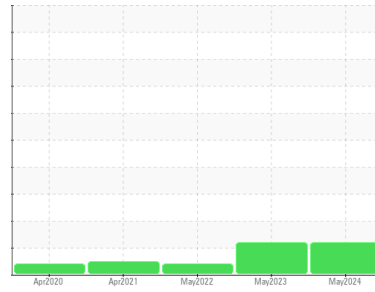




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

Granulation

Machine Id

F Toppenberg Maskinf FFK30BB01 Coating Premix, Mixer Rotating Assembly

Component

Gearbox

Fluid

MOBIL MOBILGEAR 600 XP 220 (7 GAL)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0888626	WC0795874	WC0660560
Sample Date	Client Info		23 May 2024	05 May 2023	04 May 2022
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	3	4	5
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	<1	0
Lead	ppm	ASTM D5185m	>100	0	<1	0
Copper	ppm	ASTM D5185m	>200	0	0	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Antimony	ppm	ASTM D5185m	>5	---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	<1	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		0	<1	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m		0	<1	
Calcium	ppm	ASTM D5185m		<1	<1	
Phosphorus	ppm	ASTM D5185m		667	605	576
Zinc	ppm	ASTM D5185m		<1	5	<1
Sulfur	ppm	ASTM D5185m		2153	1954	1478

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	0	1	1
Sodium	ppm	ASTM D5185m		2	0	0
Potassium	ppm	ASTM D5185m	>20	0	<1	1
Water	%	ASTM D6304	>0.2	0.005	0.009	0.003
ppm Water	ppm	ASTM D6304	>2000	53	96.5	26.9

FLUID CLEANLINESS

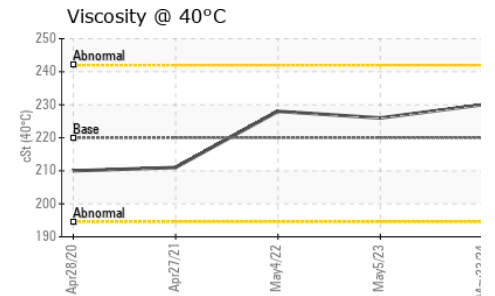
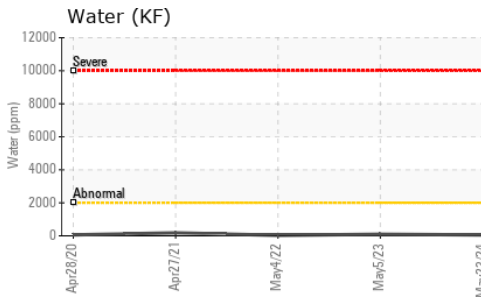
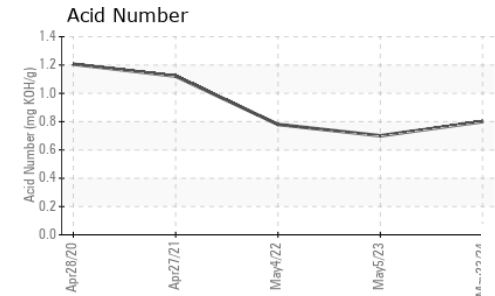
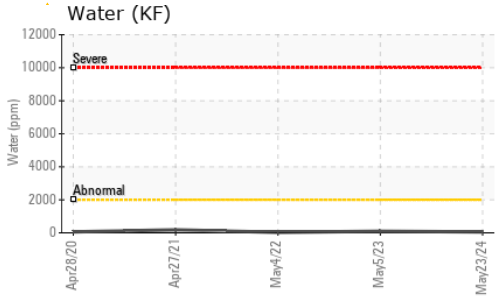
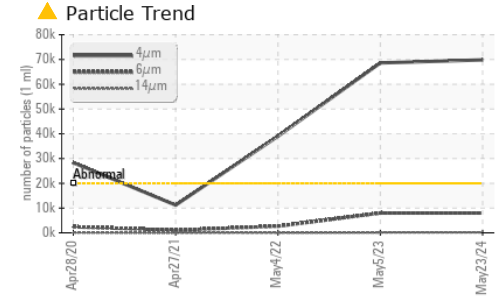
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 69832	▲ 68606	● 39030
Particles >6µm	ASTM D7647	>5000	● 7994	● 7991	● 2688
Particles >14µm	ASTM D7647	>640	160	131	53
Particles >21µm	ASTM D7647	>160	24	7	8
Particles >38µm	ASTM D7647	>40	2	0	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/20/14	▲ 23/20/14	● 22/19/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.80	0.70	0.78



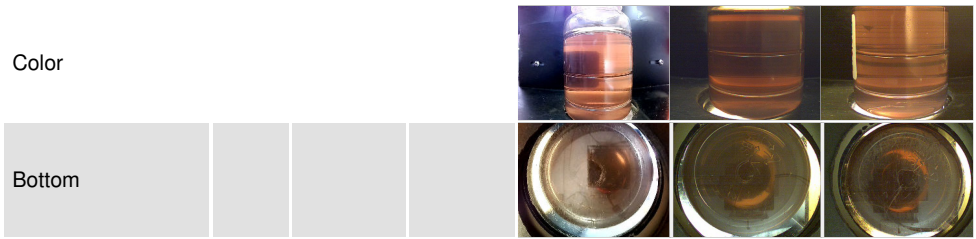
OIL ANALYSIS REPORT



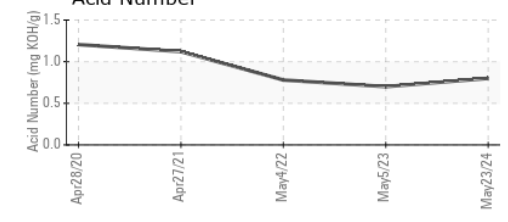
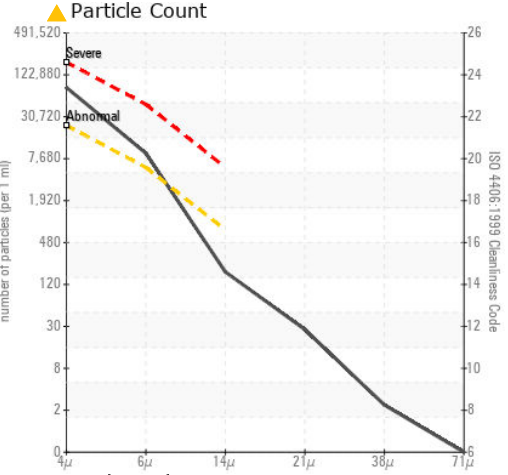
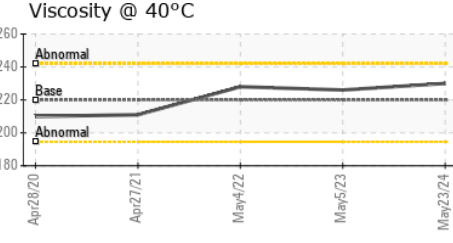
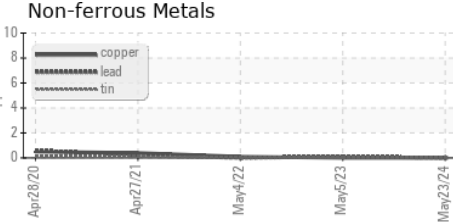
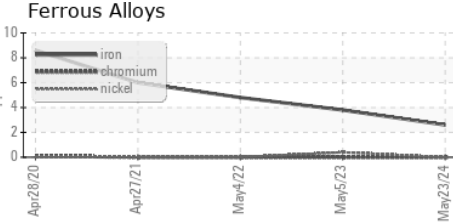
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	230	226

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0888626 **Received** : 03 Jun 2024
Lab Number : 06197616 **Tested** : 04 Jun 2024
Unique Number : 11059739 **Diagnosed** : 04 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

NOVOZYMES
 P.O. BOX 576, 77 PERRY CHAPEL CHURCH ROAD
 FRANKLINTON, NC
 US 27525
 Contact: BRUCE THOMAS
 brct@novozymes.com
 T: (919)494-3146
 F: (919)494-3456

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)