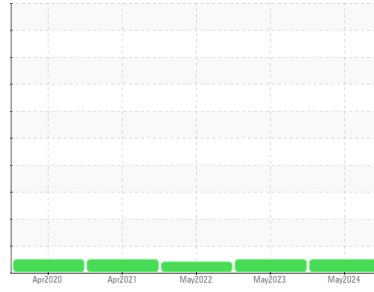




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

## Granulation

Machine Id

### Lodge FFK35BB01 Granulation Mixer, Mixer Rotating Assemb

Component

### Gearbox

Fluid

### MOBIL MOBILGEAR 600 XP 220 (7 GAL)

#### DIAGNOSIS

##### Recommendation

Resample at the next service interval to monitor.

##### Wear

All component wear rates are normal.

##### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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			<b>WC0888627</b>	WC0795875	WC0675387
Sample Date	Client Info			<b>23 May 2024</b>	05 May 2023	04 May 2022
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>69</b>	78	96
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	1	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>200	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	>5	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	<1	1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m		<b>2</b>	3	4
Phosphorus	ppm	ASTM D5185m		<b>684</b>	649	632
Zinc	ppm	ASTM D5185m		<b>28</b>	36	35
Sulfur	ppm	ASTM D5185m		<b>2443</b>	2153	1734

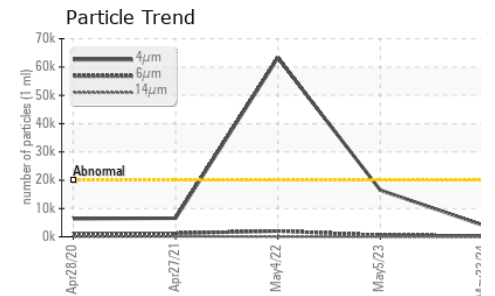
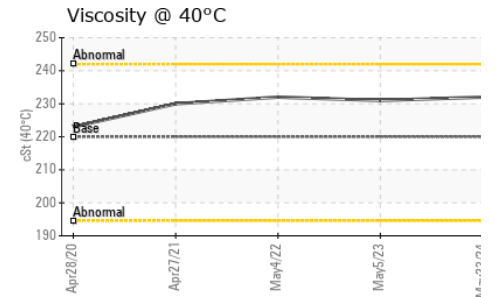
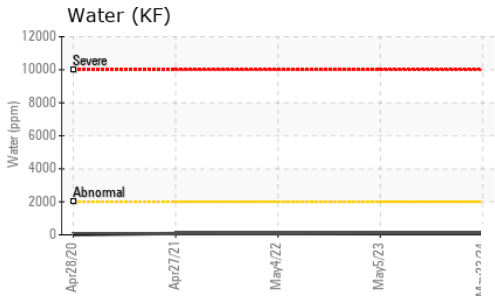
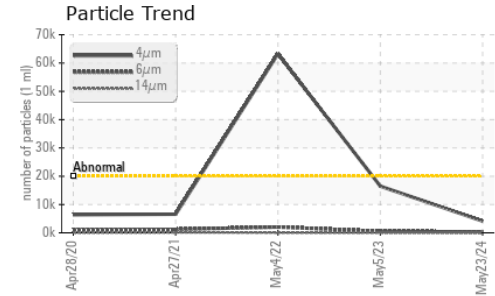
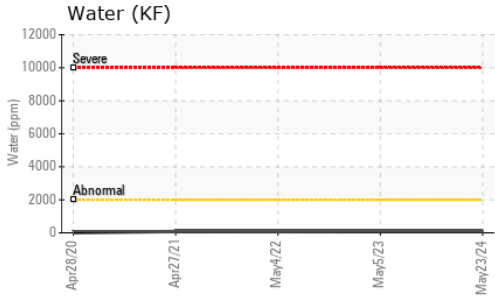
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>2</b>	2	2
Sodium	ppm	ASTM D5185m		<b>3</b>	<1	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Water	%	ASTM D6304	>0.2	<b>0.010</b>	0.010	0.007
ppm Water	ppm	ASTM D6304	>2000	<b>107</b>	106.1	73.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>4141</b>	16490	▲ 63223
Particles >6µm		ASTM D7647	>5000	<b>303</b>	546	2058
Particles >14µm		ASTM D7647	>640	<b>12</b>	12	35
Particles >21µm		ASTM D7647	>160	<b>3</b>	2	6
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>19/15/11</b>	21/16/11	▲ 23/18/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.88</b>	0.88	1.00



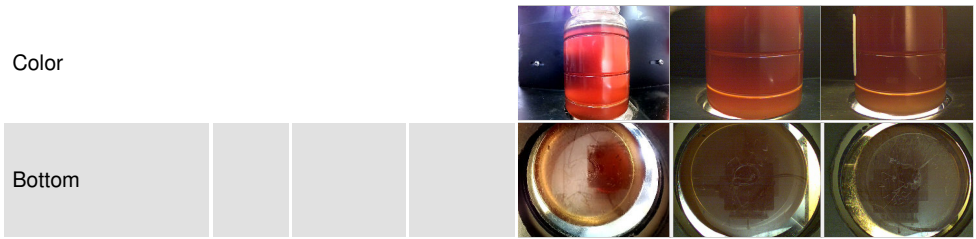
# OIL ANALYSIS REPORT



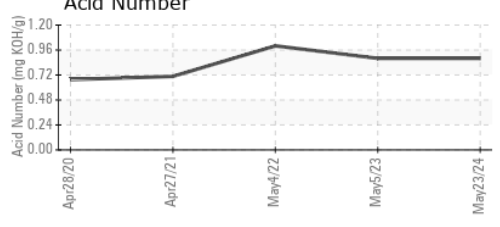
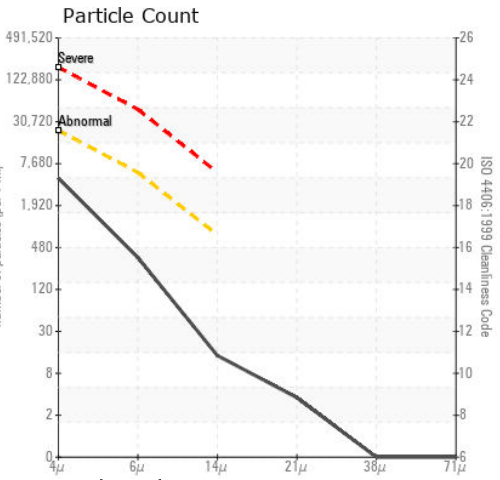
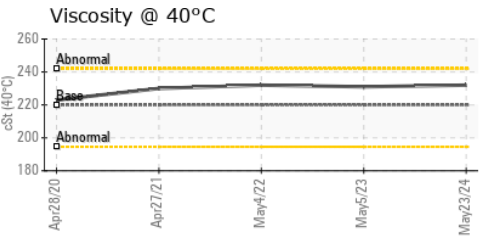
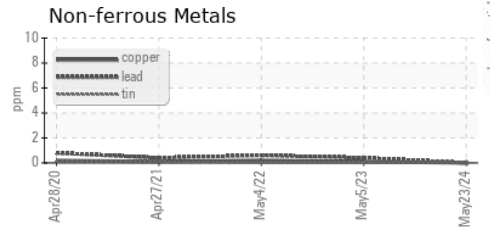
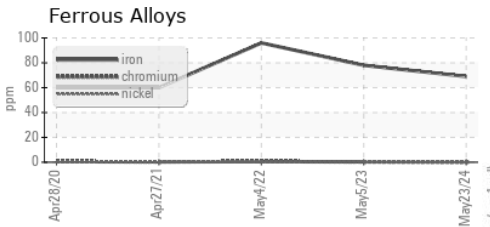
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	232	231	232

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0888627      **Received** : 03 Jun 2024  
**Lab Number** : 06197619      **Tested** : 04 Jun 2024  
**Unique Number** : 11059742      **Diagnosed** : 04 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**NOVOZYMES**  
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 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)