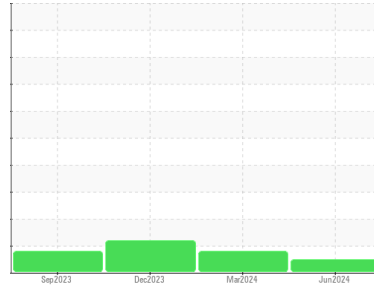




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
NORD BLENDER 2 (S/N 261130)

Component
Top Gearbox
 Fluid
TOTAL ENERGY 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

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

SAMPLE INFORMATION

Sample Number	Client Info	method	limit/base	current	history1	history2
USP0013027	USP0006025					
Sample Date	Client Info			19 Jun 2024	11 Mar 2024	27 Dec 2023
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				NORMAL	ATTENTION	ABNORMAL

WEAR METALS

Element	unit	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	0	<1	11
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	0	0	0
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

Element	unit	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	<1	1
Phosphorus	ppm	ASTM D5185m		546	562	465
Zinc	ppm	ASTM D5185m		0	0	18
Sulfur	ppm	ASTM D5185m		509	555	382

CONTAMINANTS

Element	unit	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	2	2
Sodium	ppm	ASTM D5185m		0	2	4
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>0.2	0.005	0.001	0.008
ppm Water	ppm	ASTM D6304	>2000	51	2	90

FLUID CLEANLINESS

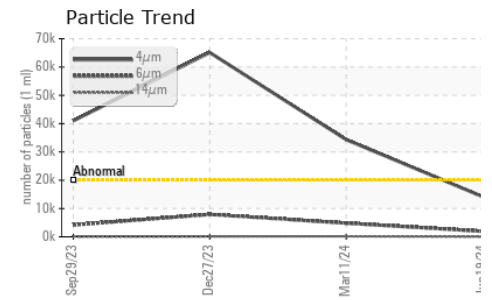
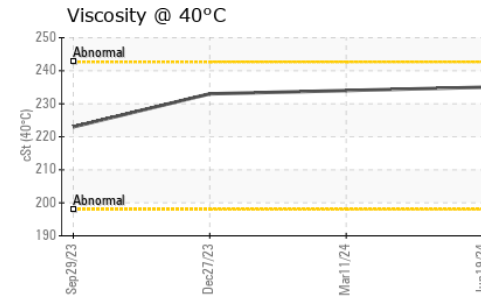
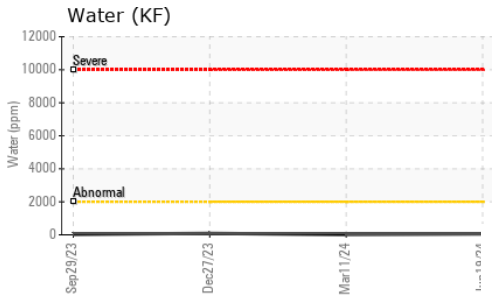
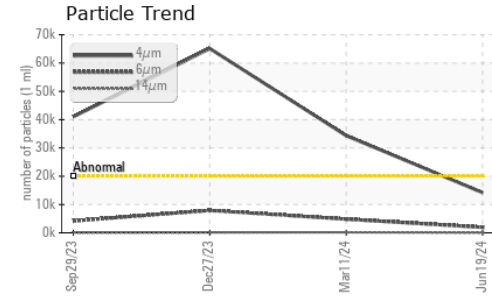
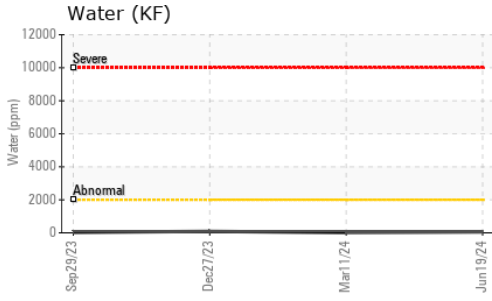
Parameter	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	14200	● 34345	▲ 65115
Particles >6µm	ASTM D7647	>5000	1961	● 4841	● 7921
Particles >14µm	ASTM D7647	>640	33	● 175	● 122
Particles >21µm	ASTM D7647	>160	4	● 43	● 14
Particles >38µm	ASTM D7647	>40	0	● 1	● 1
Particles >71µm	ASTM D7647	>10	0	● 0	● 0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	21/18/12	● 22/19/15	▲ 23/20/14

FLUID DEGRADATION

Parameter	unit	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.63	0.67	0.62



OIL ANALYSIS REPORT

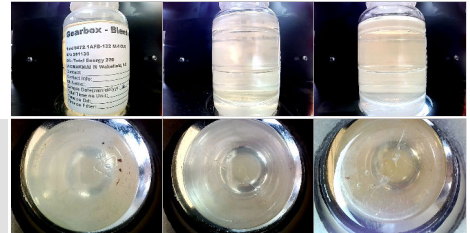
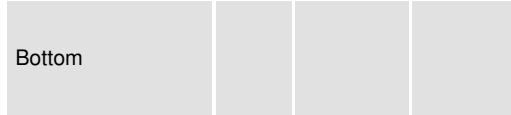


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

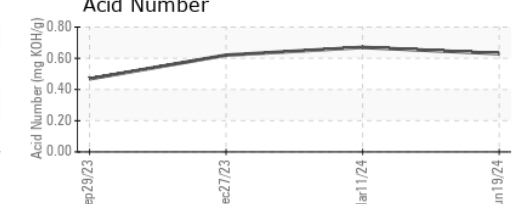
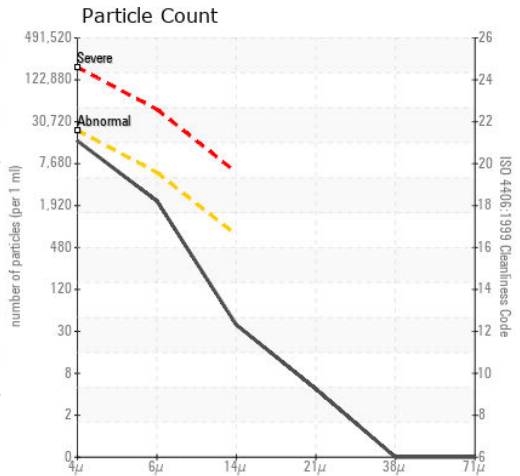
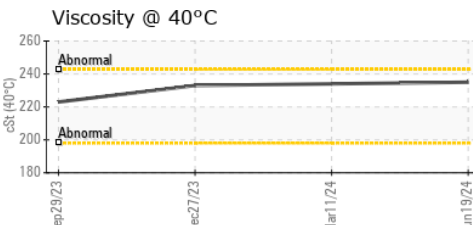
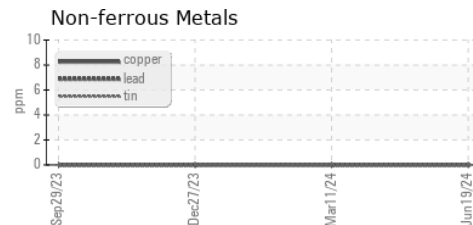
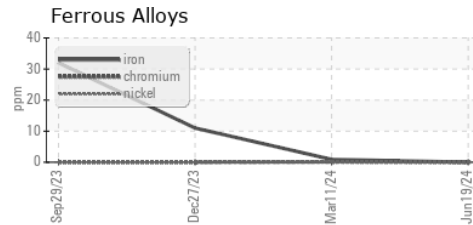
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	235	234	233

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : USP0013027
 Lab Number : 06221254
 Unique Number : 11099451
 Test Package : IND 2
 Received : 26 Jun 2024
 Tested : 27 Jun 2024
 Diagnosed : 28 Jun 2024 - Doug Bogart

MICHAEL FOODS - WAKEFIELD
 105 NORTH MAIN STREET
 WAKEFIELD, NE
 US
 Contact: BRUCE PARKER

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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