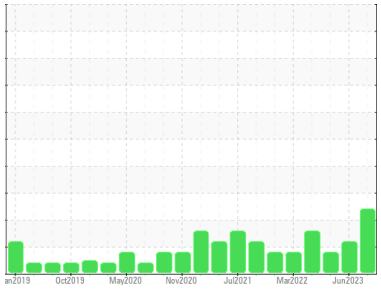
OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Area
Fresh gallon blow mold room
Machine Id
755-FG-BMM-01-E (S/N N0100AA030135)
Component
Top Gear Extruder
Fluid
GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
The oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP0007676**	USP234965	USP228852
Sample Date		Client Info		**14 Feb 2024**	19 Jun 2023	06 Sep 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	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	**51**	14	10
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>10	**<1**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>25	**1**	0	0
Lead	ppm	ASTM D5185m	>100	**<1**	0	0
Copper	ppm	ASTM D5185m	>50	**1**	<1	10
Tin	ppm	ASTM D5185m	>10	**<1**	0	0
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	50	**21**	20	0
Barium	ppm	ASTM D5185m	15	**0**	2	0
Molybdenum	ppm	ASTM D5185m	15	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m	50	**<1**	0	0
Calcium	ppm	ASTM D5185m	50	**6**	16	29
Phosphorus	ppm	ASTM D5185m	350	**240**	270	299
Zinc	ppm	ASTM D5185m	100	**18**	28	210
Sulfur	ppm	ASTM D5185m	12500	**5851**	6661	5641

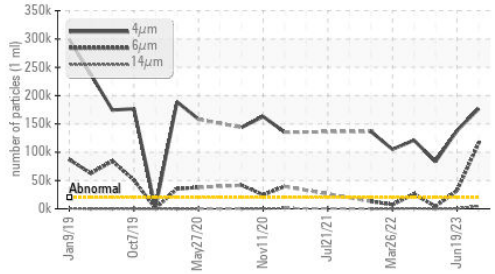
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**15**	20	1
Sodium	ppm	ASTM D5185m		**<1**	3	0
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	0
Water	%	ASTM D6304	>0.1	**0.002**	0.009	0.008
ppm Water	ppm	ASTM D6304	>1000	**18**	96.0	83.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **176767**	▲ 138173	▲ 83452
Particles >6µm		ASTM D7647	>5000	▲ **115442**	▲ 32148	4133
Particles >14µm		ASTM D7647	>640	▲ **4968**	181	22
Particles >21µm		ASTM D7647	>160	▲ **176**	15	3
Particles >38µm		ASTM D7647	>40	**1**	0	1
Particles >71µm		ASTM D7647	>10	**0**	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/24/19**	▲ 24/22/15	▲ 24/19/12

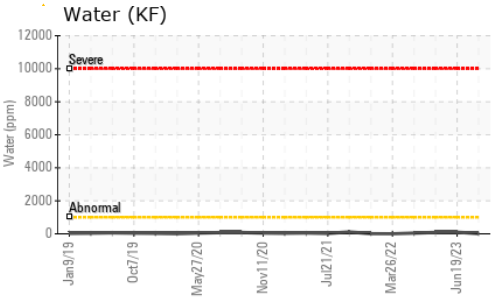
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**0.60**	0.98	0.33

OIL ANALYSIS REPORT

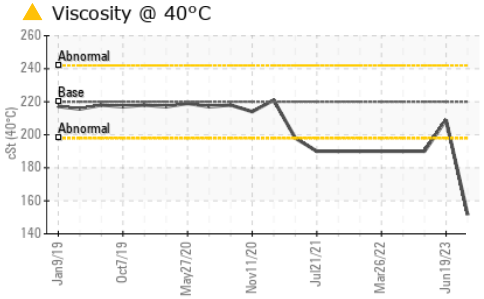
Particle Trend



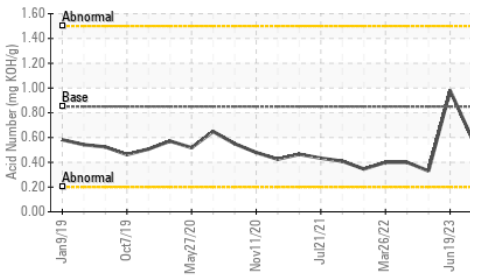
Water (KF)



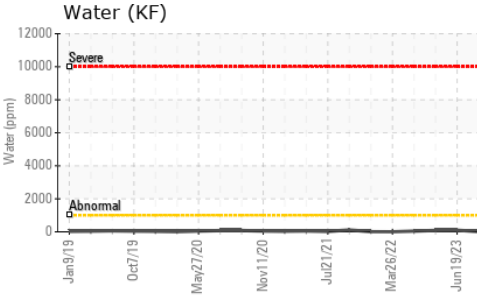
Viscosity @ 40°C



Acid Number



Water (KF)



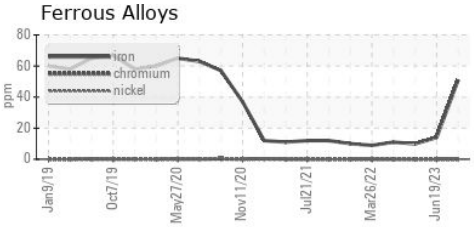
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**LIGHT**	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
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 @ 40°C	cSt	ASTM D445	220	▲ **151.6**	209	190

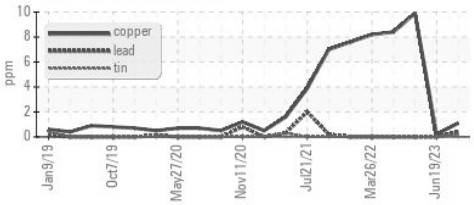
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

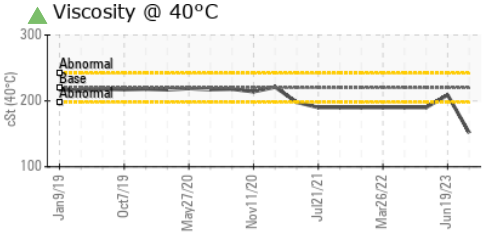
Ferrous Alloys



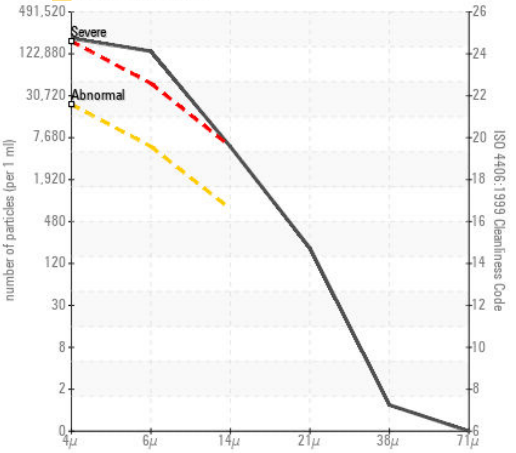
Non-ferrous Metals



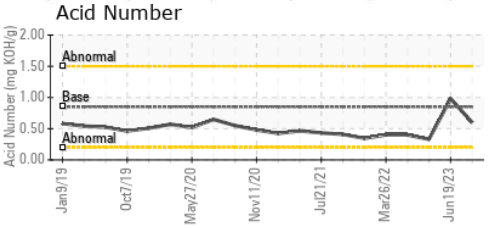
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0007676
Lab Number : 06099171
Unique Number : 10897401
Test Package : IND 2

Received : 23 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Doug Bogart

KROGER MOUNTAIN VIEW FOODS
10241 EAST 51ST AVE
DENVER, CO
US 80239
Contact: CHARLES AMMERMAN

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)

T:
F: