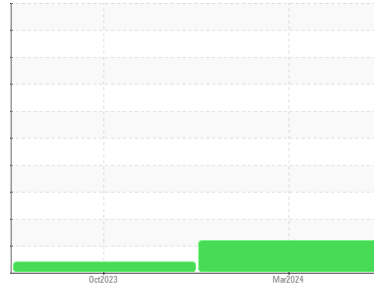




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
WALPOLE
 Machine Id
997 - WALPOLE
 Component
Rear Differential
 Fluid
{not provided} (--- 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		WC0934492	WC0876076	---
Sample Date	Client Info		22 Mar 2024	16 Oct 2023	---
Machine Age	mls	Client Info	55163	18684	---
Oil Age	mls	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	93	98	---
Chromium	ppm	ASTM D5185m >10	<1	2	---
Nickel	ppm	ASTM D5185m >10	<1	<1	---
Titanium	ppm	ASTM D5185m	0	<1	---
Silver	ppm	ASTM D5185m	0	<1	---
Aluminum	ppm	ASTM D5185m >25	2	2	---
Lead	ppm	ASTM D5185m >25	0	<1	---
Copper	ppm	ASTM D5185m >100	<1	1	---
Tin	ppm	ASTM D5185m >10	<1	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	212	254	---
Barium	ppm	ASTM D5185m	3	11	---
Molybdenum	ppm	ASTM D5185m	0	<1	---
Manganese	ppm	ASTM D5185m	5	6	---
Magnesium	ppm	ASTM D5185m	63	78	---
Calcium	ppm	ASTM D5185m	7	11	---
Phosphorus	ppm	ASTM D5185m	1673	2046	---
Zinc	ppm	ASTM D5185m	10	13	---
Sulfur	ppm	ASTM D5185m	30071	33432	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	19	23	---
Sodium	ppm	ASTM D5185m	4	2	---
Potassium	ppm	ASTM D5185m >20	2	2	---
Water	%	ASTM D6304 >.2	0.042	0.036	---
ppm Water	ppm	ASTM D6304 >2000	421	364	---

FLUID CLEANLINESS

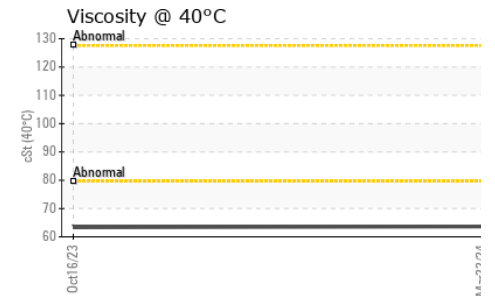
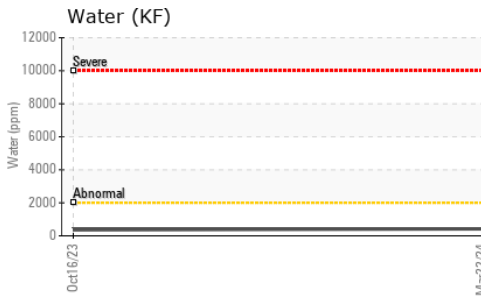
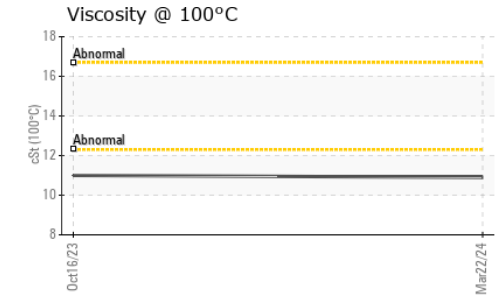
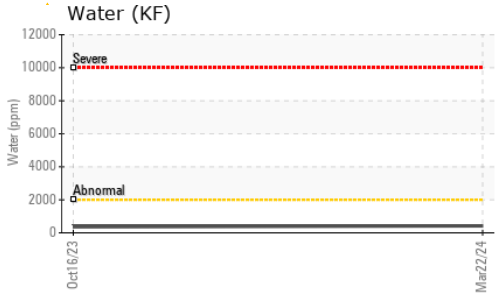
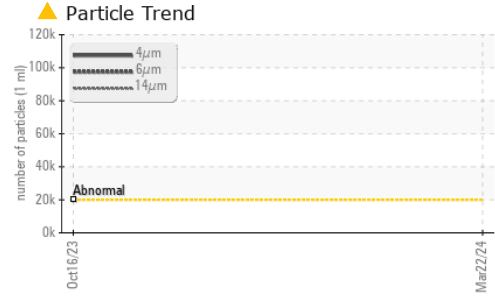
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 118026	---	---
Particles >6µm	ASTM D7647	>5000	▲ 20901	---	---
Particles >14µm	ASTM D7647	>640	87	---	---
Particles >21µm	ASTM D7647	>160	11	---	---
Particles >38µm	ASTM D7647	>40	3	---	---
Particles >71µm	ASTM D7647	>10	1	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/22/14	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.66	1.49	---



OIL ANALYSIS REPORT



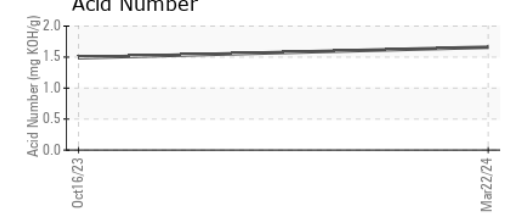
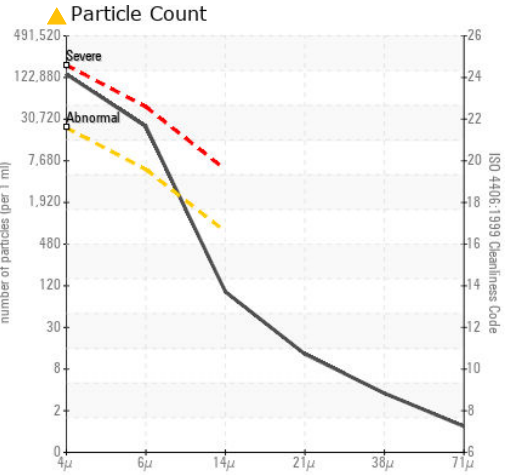
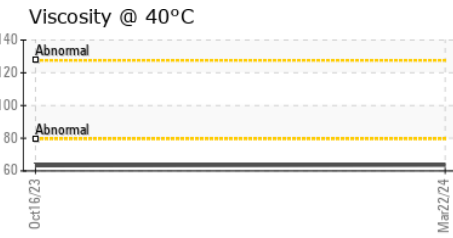
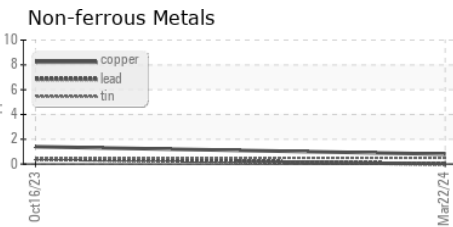
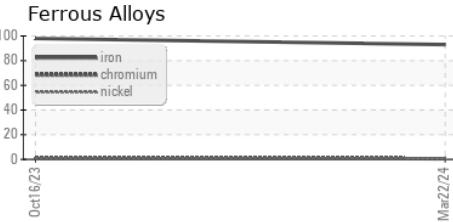
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	MODER	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	63.6	63.3	---
Visc @ 100°C	cSt	ASTM D445	10.9	11.0	---
Viscosity Index (VI)	Scale	ASTM D2270	163	167	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				no image
Bottom				no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934492 **Received** : 14 May 2024
Lab Number : 06179404 **Tested** : 21 May 2024
Unique Number : 11030730 **Diagnosed** : 21 May 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

BASF - GIANNA CREDAROLI
 500 WHITE PLAINS RD
 TARRYTOWN, NY
 US 10591
 Contact: GIANNA CREDAROLI
 gianna.credaroli@basf.com

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)