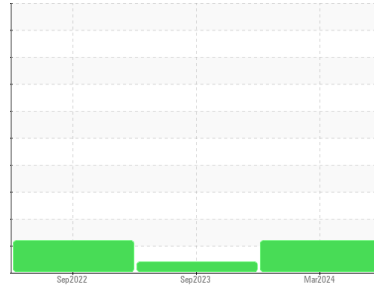




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**WALPOLE**  
Machine Id  
**942 - WALPOLE**  
Component  
**Front 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		<b>WC0900842</b>	WC0853868	WC0751728
Sample Date	Client Info		<b>07 Mar 2024</b>	07 Sep 2023	06 Sep 2022
Machine Age	mls	Client Info	<b>149189</b>	116495	781
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>252</b>	234	37
Chromium	ppm	ASTM D5185m >10	<b>3</b>	3	<1
Nickel	ppm	ASTM D5185m >10	<b>1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>4</b>	2	1
Lead	ppm	ASTM D5185m >25	<b>4</b>	3	<1
Copper	ppm	ASTM D5185m >100	<b>35</b>	27	4
Tin	ppm	ASTM D5185m >10	<b>4</b>	3	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>66</b>	66	74
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>9</b>	7	5
Magnesium	ppm	ASTM D5185m	<b>186</b>	193	189
Calcium	ppm	ASTM D5185m	<b>10</b>	2	7
Phosphorus	ppm	ASTM D5185m	<b>1704</b>	1583	1687
Zinc	ppm	ASTM D5185m	<b>6</b>	6	15
Sulfur	ppm	ASTM D5185m	<b>25374</b>	26545	30371

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>45</b>	39	29
Sodium	ppm	ASTM D5185m	<b>2</b>	3	7
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	2
Water	%	ASTM D6304 >.2	<b>0.023</b>	0.056	0.042
ppm Water	ppm	ASTM D6304 >2000	<b>232</b>	568.9	427.6

## FLUID CLEANLINESS

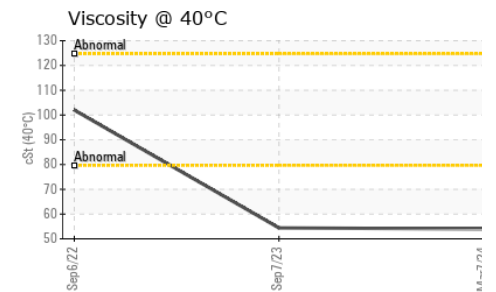
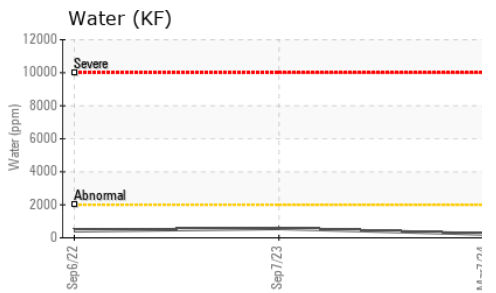
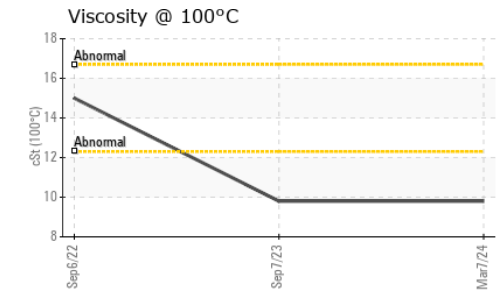
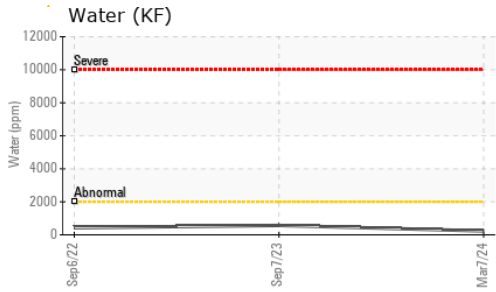
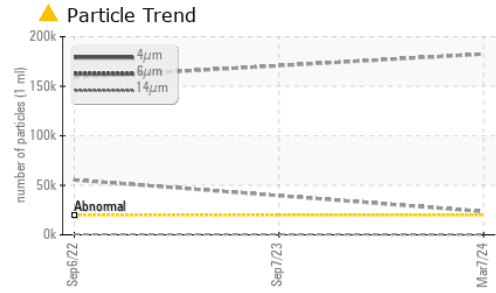
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 182504</b>	---	▲ 159052
Particles >6µm	ASTM D7647	>5000	<b>▲ 23597</b>	---	▲ 55392
Particles >14µm	ASTM D7647	>640	<b>275</b>	---	584
Particles >21µm	ASTM D7647	>160	<b>36</b>	---	44
Particles >38µm	ASTM D7647	>40	<b>0</b>	---	1
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 25/22/15</b>	---	▲ 24/23/16

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.34</b>	0.51	0.51



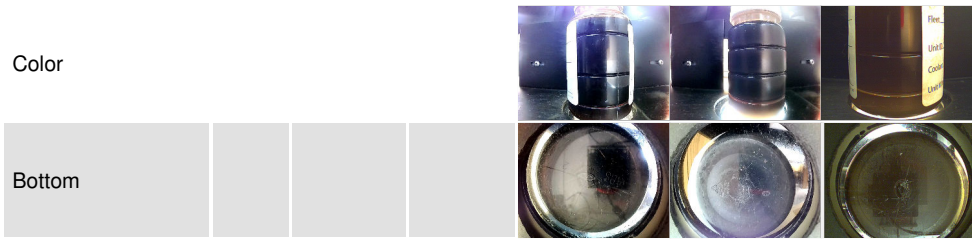
# OIL ANALYSIS REPORT



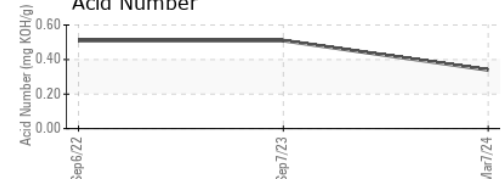
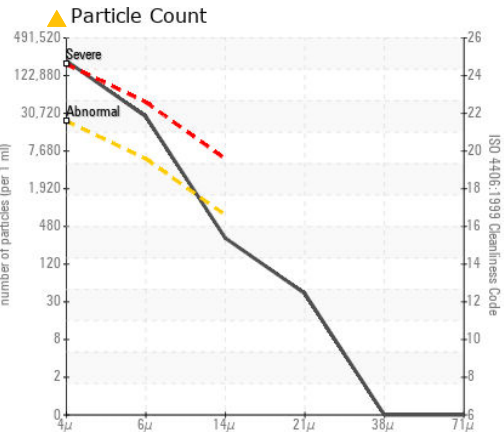
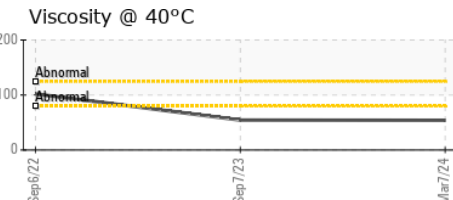
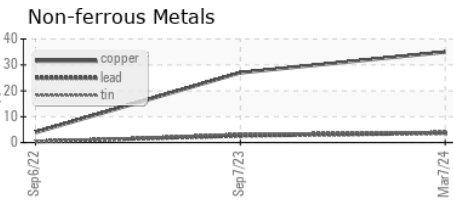
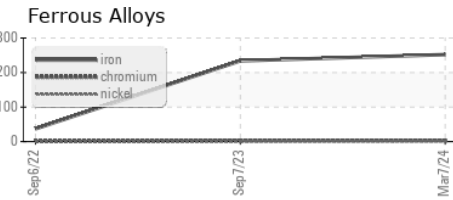
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	54.0	54.4	102
Visc @ 100°C	cSt	ASTM D445	9.8	9.8	15.0
Viscosity Index (VI)	Scale	ASTM D2270	169	167	153

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0900842 **Received** : 27 Mar 2024  
**Lab Number** : 06131409 **Tested** : 28 Mar 2024  
**Unique Number** : 10950874 **Diagnosed** : 02 Apr 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)