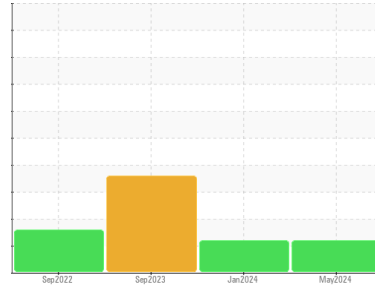




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**WALPOLE**  
 Machine Id  
**945 - 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>WC0934501</b>	WC0900922	WC0853880
Sample Date	Client Info		<b>03 May 2024</b>	12 Jan 2024	22 Sep 2023
Machine Age	mls	Client Info	<b>190042</b>	154596	117188
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>377</b>	370	375
Chromium	ppm	ASTM D5185m >10	<b>4</b>	4	4
Nickel	ppm	ASTM D5185m >10	<b>2</b>	2	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>5</b>	5	5
Lead	ppm	ASTM D5185m >25	<b>5</b>	8	5
Copper	ppm	ASTM D5185m >100	<b>53</b>	56	51
Tin	ppm	ASTM D5185m >10	<b>7</b>	7	5
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>69</b>	59	51
Barium	ppm	ASTM D5185m	<b>3</b>	2	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>10</b>	11	9
Magnesium	ppm	ASTM D5185m	<b>191</b>	191	190
Calcium	ppm	ASTM D5185m	<b>10</b>	10	7
Phosphorus	ppm	ASTM D5185m	<b>1793</b>	1686	1638
Zinc	ppm	ASTM D5185m	<b>10</b>	11	2
Sulfur	ppm	ASTM D5185m	<b>29219</b>	23388	23282

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>45</b>	43	40
Sodium	ppm	ASTM D5185m	<b>5</b>	6	4
Potassium	ppm	ASTM D5185m >20	<b>2</b>	4	0
Water	%	ASTM D6304 >.2	<b>0.038</b>	0.043	0.019
ppm Water	ppm	ASTM D6304 >2000	<b>388</b>	437	191.7

## FLUID CLEANLINESS

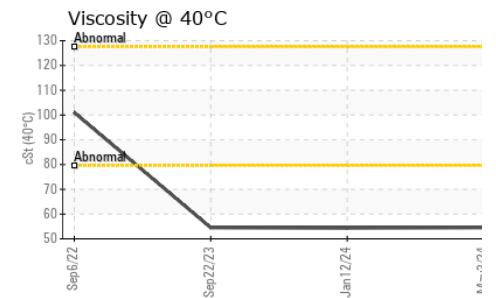
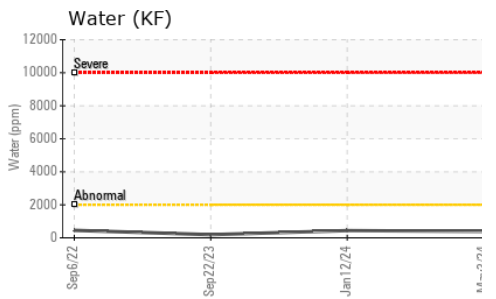
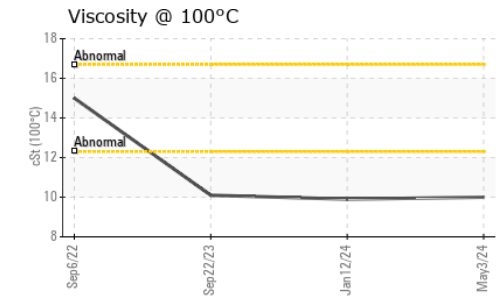
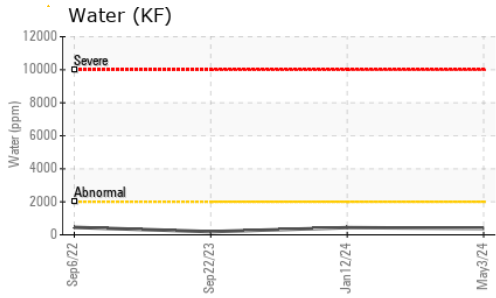
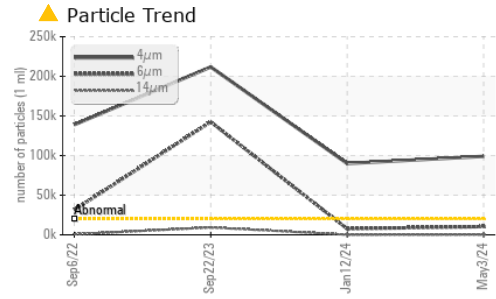
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 99027</b>	▲ 90016	▲ 211815
Particles >6µm	ASTM D7647	>5000	<b>▲ 10388</b>	● 7588	▲ 142487
Particles >14µm	ASTM D7647	>640	<b>251</b>	147	▲ 9276
Particles >21µm	ASTM D7647	>160	<b>52</b>	49	▲ 1011
Particles >38µm	ASTM D7647	>40	<b>1</b>	5	10
Particles >71µm	ASTM D7647	>10	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 24/21/15</b>	▲ 24/20/14	▲ 25/24/20

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.57</b>	0.56	0.70



# OIL ANALYSIS REPORT

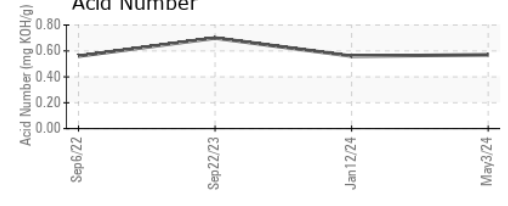
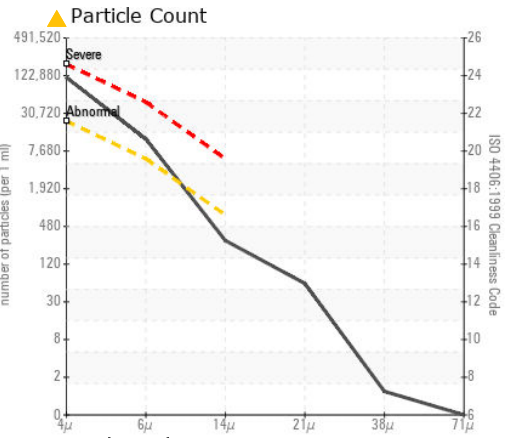
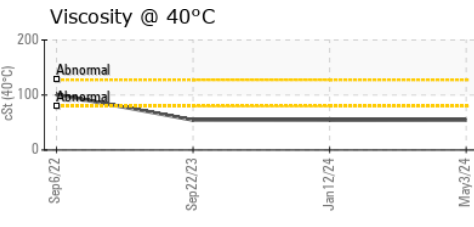
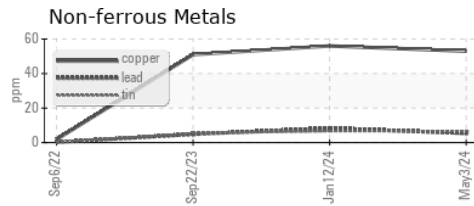
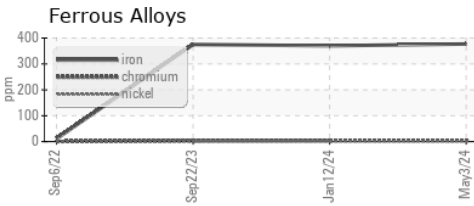


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	54.5	54.3	54.5
Visc @ 100°C	cSt	ASTM D445	10.0	9.9	10.1
Viscosity Index (VI)	Scale	ASTM D2270	172	170	175

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0934501      **Received** : 14 May 2024  
**Lab Number** : 06179394      **Tested** : 16 May 2024  
**Unique Number** : 11030720      **Diagnosed** : 16 May 2024 - Angela Borella  
**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)