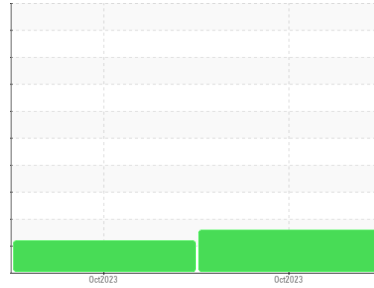




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**DICK LAVY [AFTER]**  
 Machine Id  
**DICK LAVY 4966**  
 Component  
**Front Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

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

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates 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>WC0853957</b>	WC0853956	---
Sample Date	Client Info		<b>07 Oct 2023</b>	06 Oct 2023	---
Machine Age	mls Client Info		<b>455</b>	455	---
Oil Age	mls Client Info		<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>500	<b>0</b>	8	---
Chromium	ppm ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Titanium	ppm ASTM D5185m		<b>0</b>	0	---
Silver	ppm ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm ASTM D5185m	>25	<b>0</b>	<1	---
Lead	ppm ASTM D5185m	>25	<b>0</b>	0	---
Copper	ppm ASTM D5185m	>100	<b>0</b>	0	---
Tin	ppm ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Vanadium	ppm ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm ASTM D5185m		<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	400	<b>268</b>	164	---
Barium	ppm ASTM D5185m	200	<b>0</b>	<1	---
Molybdenum	ppm ASTM D5185m	12	<b>0</b>	0	---
Manganese	ppm ASTM D5185m		<b>&lt;1</b>	1	---
Magnesium	ppm ASTM D5185m	12	<b>&lt;1</b>	1	---
Calcium	ppm ASTM D5185m	150	<b>1</b>	18	---
Phosphorus	ppm ASTM D5185m	1650	<b>1454</b>	1074	---
Zinc	ppm ASTM D5185m	125	<b>0</b>	13	---
Sulfur	ppm ASTM D5185m	22500	<b>25191</b>	24356	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>75	<b>&lt;1</b>	8	---
Sodium	ppm ASTM D5185m		<b>0</b>	1	---
Potassium	ppm ASTM D5185m	>20	<b>0</b>	1	---
Water	% ASTM D6304	>.2	<b>0.032</b>	0.031	---
ppm Water	ppm ASTM D6304	>2000	<b>329.2</b>	311.2	---

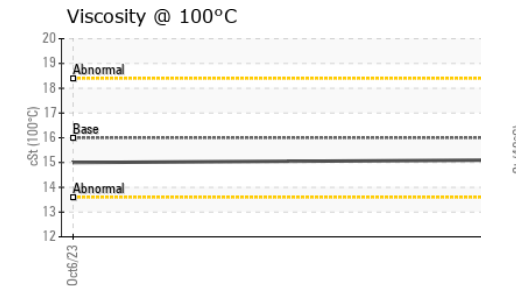
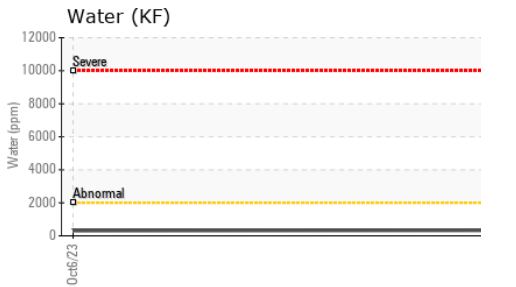
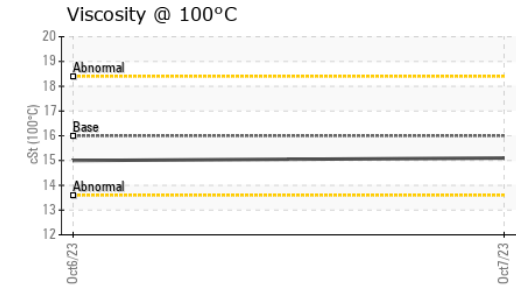
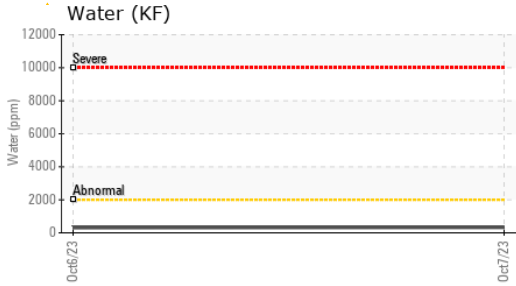
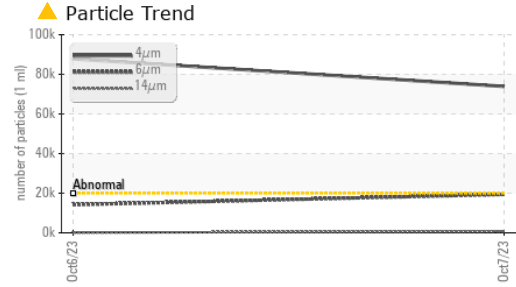
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 73900</b>	▲ 87826	---
Particles >6µm	ASTM D7647	>5000	<b>▲ 19380</b>	▲ 14176	---
Particles >14µm	ASTM D7647	>640	<b>▲ 699</b>	100	---
Particles >21µm	ASTM D7647	>160	<b>140</b>	11	---
Particles >38µm	ASTM D7647	>40	<b>6</b>	3	---
Particles >71µm	ASTM D7647	>10	<b>1</b>	2	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/21/17</b>	▲ 24/21/14	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	2.00	<b>2.26</b>	3.24	---

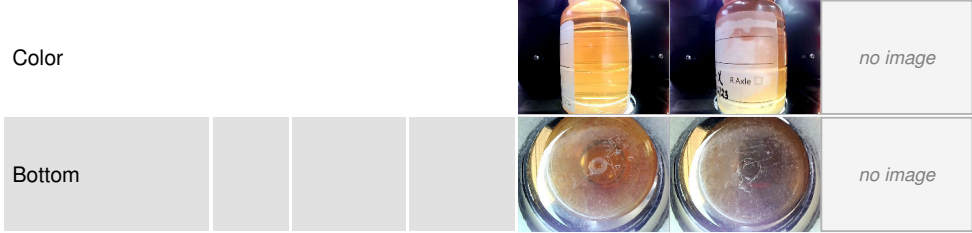
# OIL ANALYSIS REPORT



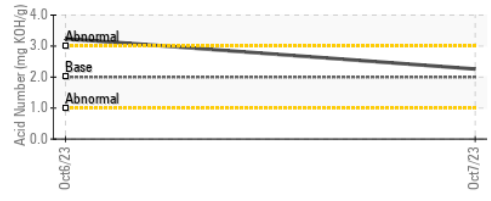
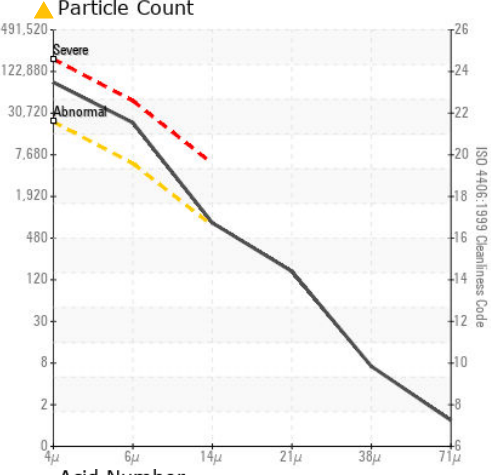
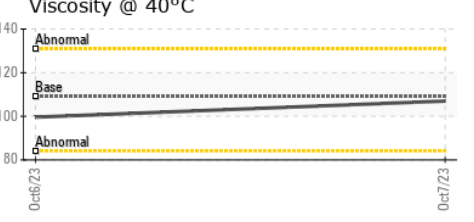
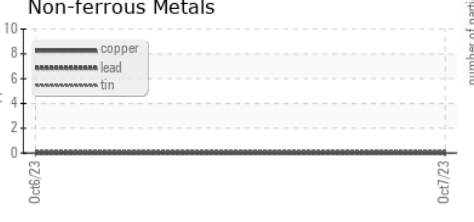
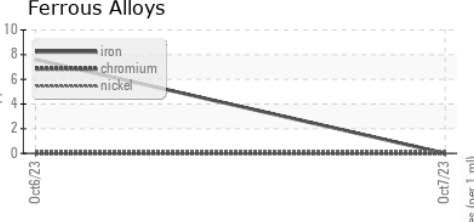
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	109	99.6	---
Visc @ 100°C	cSt	ASTM D445	15.1	15.0	---
Viscosity Index (VI)	Scale	ASTM D2270	147	157	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0853957 **Received** : 20 Nov 2023  
**Lab Number** : 06013274 **Diagnosed** : 24 Nov 2023  
**Unique Number** : 10752418 **Diagnostician** : Don Baldrige  
**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)