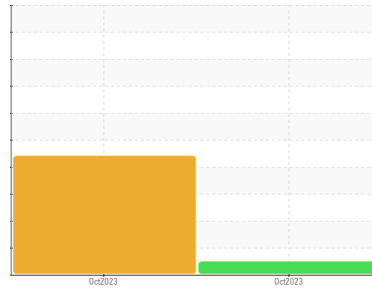




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**DICK LAVY**  
 Machine Id  
**DICK LAVY 4965**  
 Component  
**Rear Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 75W90. Please confirm. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

### 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>WC0843139</b>	WC0843138	---
Sample Date	Client Info		<b>04 Oct 2023</b>	04 Oct 2023	---
Machine Age	mls	Client Info	<b>479</b>	479	---
Oil Age	mls	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>NORMAL</b>	SEVERE	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>500	<b>0</b>	18	---
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>	<1	---
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	0	---
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>264</b>	167	---
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	1	---
Magnesium	ppm	ASTM D5185m	12	<b>&lt;1</b>	<1	---
Calcium	ppm	ASTM D5185m	150	<b>1</b>	15	---
Phosphorus	ppm	ASTM D5185m	1650	<b>1423</b>	1085	---
Zinc	ppm	ASTM D5185m	125	<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m	22500	<b>24799</b>	24088	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>75	<b>&lt;1</b>	10	---
Sodium	ppm	ASTM D5185m		<b>0</b>	1	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Water	%	ASTM D6304	>.2	<b>0.051</b>	0.029	---
ppm Water	ppm	ASTM D6304	>2000	<b>513.2</b>	291.0	---

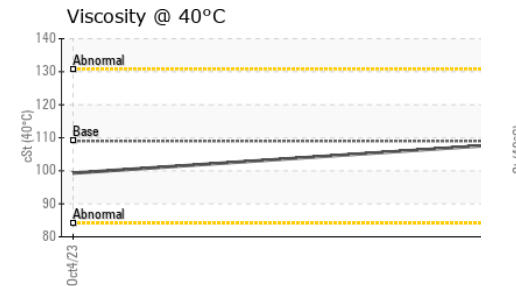
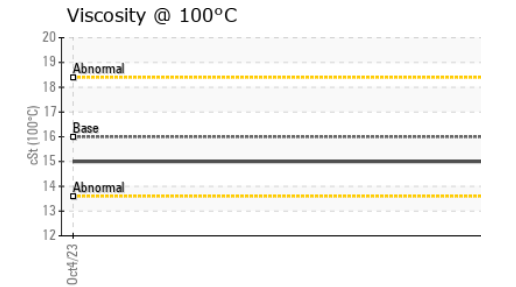
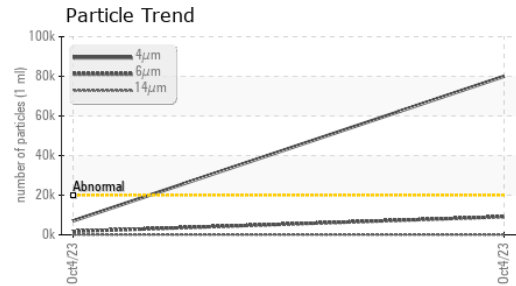
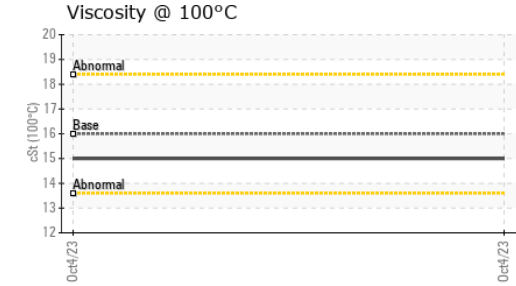
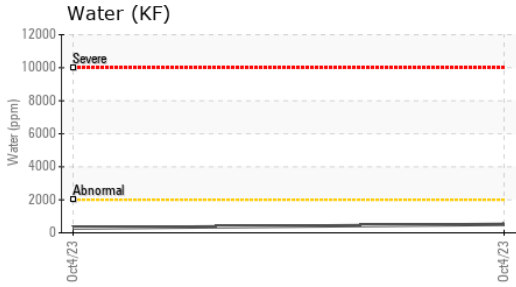
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>7044</b>	▲ 80029	---
Particles >6µm	ASTM D7647	>5000	<b>1723</b>	▲ 9113	---
Particles >14µm	ASTM D7647	>640	<b>112</b>	70	---
Particles >21µm	ASTM D7647	>160	<b>29</b>	12	---
Particles >38µm	ASTM D7647	>40	<b>2</b>	1	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>20/18/14</b>	▲ 24/20/13	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	<b>2.26</b>	● 3.53	---

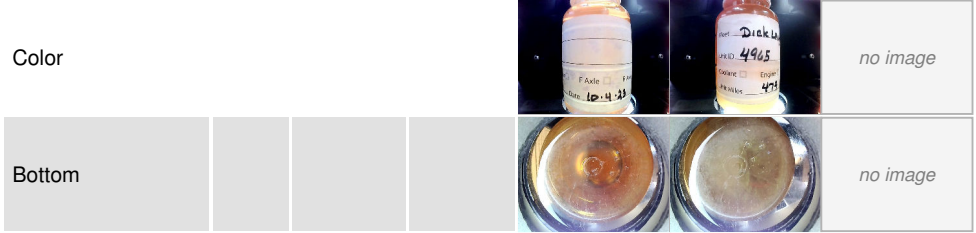
# OIL ANALYSIS REPORT



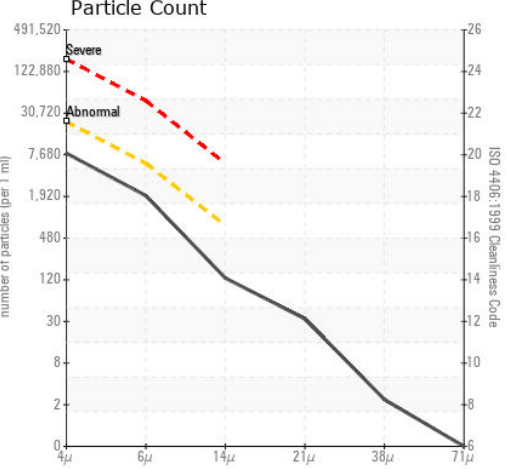
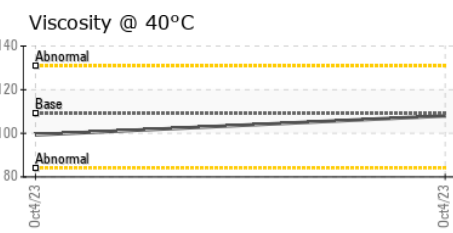
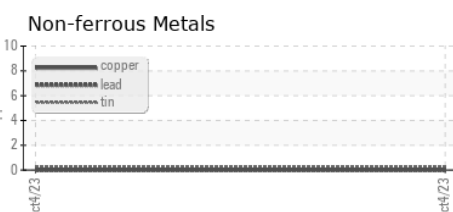
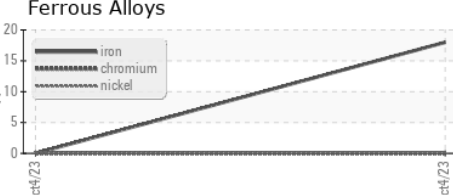
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	109	108	99.3
Visc @ 100°C	cSt	ASTM D445	16.0	15.0	15.0
Viscosity Index (VI)	Scale	ASTM D2270	157	144	158

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0843139 **Received** : 20 Nov 2023  
**Lab Number** : 06013273 **Diagnosed** : 21 Nov 2023  
**Unique Number** : 10752417 **Diagnostician** : Wes Davis  
**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)