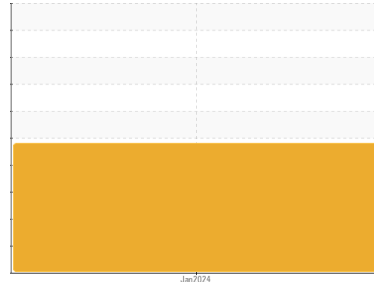




# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Area  
**PLOGER**  
 Machine Id  
**6186 - PLOGER**

Component  
**Front Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.

### ▲ Wear

Bearing and/or gear wear is indicated.

### ▲ Contamination

There is a high amount of silt (particulates < 6 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

### 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>WC0900854</b>	---	---
Sample Date	Client Info		<b>09 Jan 2024</b>	---	---
Machine Age	mls Client Info		<b>488389</b>	---	---
Oil Age	mls Client Info		<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>500	<b>▲ 513</b>	---	---
Chromium	ppm ASTM D5185m	>10	<b>4</b>	---	---
Nickel	ppm ASTM D5185m	>10	<b>5</b>	---	---
Titanium	ppm ASTM D5185m		<b>0</b>	---	---
Silver	ppm ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm ASTM D5185m	>25	<b>2</b>	---	---
Lead	ppm ASTM D5185m	>25	<b>▲ 33</b>	---	---
Copper	ppm ASTM D5185m	>100	<b>▲ 67</b>	---	---
Tin	ppm ASTM D5185m	>10	<b>2</b>	---	---
Vanadium	ppm ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm ASTM D5185m		<b>0</b>	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	400	<b>122</b>	---	---
Barium	ppm ASTM D5185m	200	<b>1</b>	---	---
Molybdenum	ppm ASTM D5185m	12	<b>&lt;1</b>	---	---
Manganese	ppm ASTM D5185m		<b>16</b>	---	---
Magnesium	ppm ASTM D5185m	12	<b>3</b>	---	---
Calcium	ppm ASTM D5185m	150	<b>14</b>	---	---
Phosphorus	ppm ASTM D5185m	1650	<b>1278</b>	---	---
Zinc	ppm ASTM D5185m	125	<b>22</b>	---	---
Sulfur	ppm ASTM D5185m	22500	<b>24874</b>	---	---

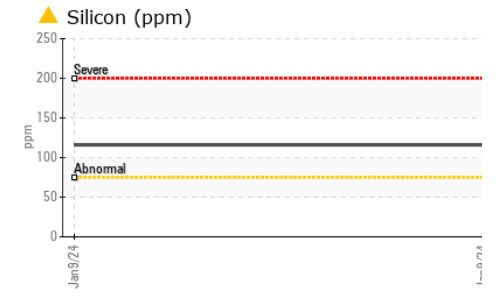
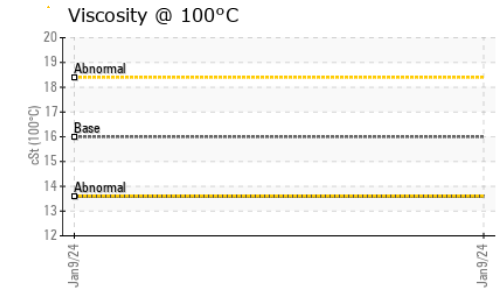
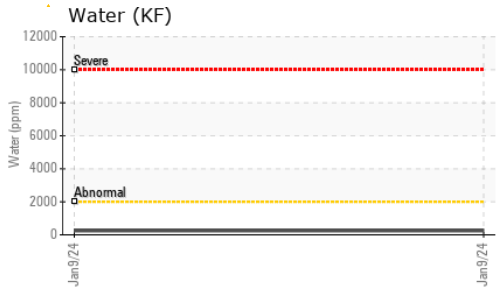
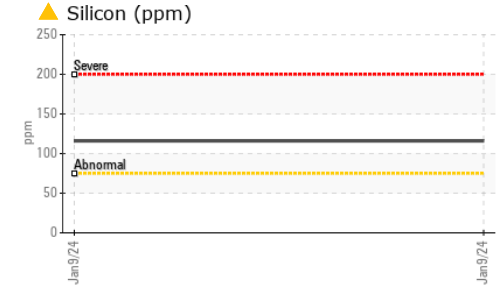
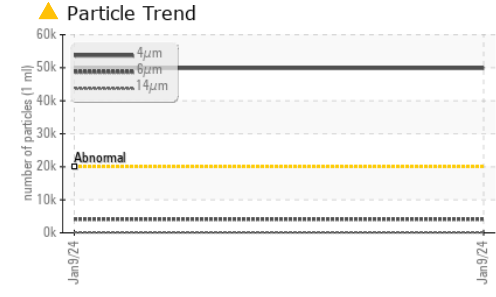
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>75	<b>▲ 116</b>	---	---
Sodium	ppm ASTM D5185m		<b>8</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>0</b>	---	---
Water	% ASTM D6304	>.2	<b>0.024</b>	---	---
ppm Water	ppm ASTM D6304	>2000	<b>250</b>	---	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 49845</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>4131</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>139</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>30</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/19/14</b>	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	2.00	<b>2.75</b>	---	---



# OIL ANALYSIS REPORT



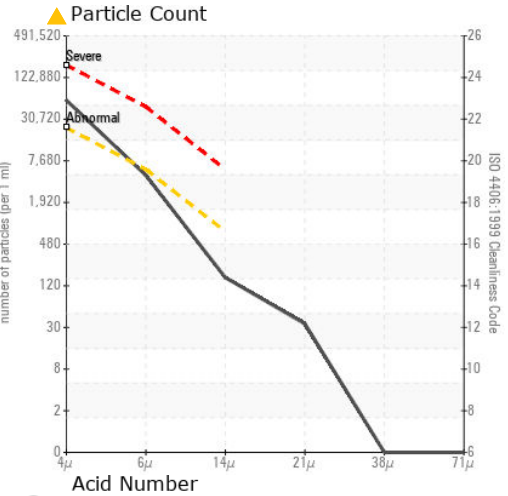
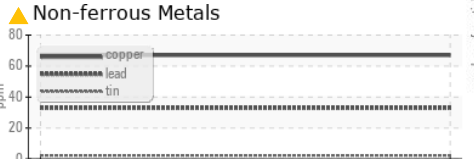
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	109	97.7	---	---
Visc @ 100°C	cSt	ASTM D445	16.0	13.6	---	---
Viscosity Index (VI)	Scale	ASTM D2270	157	139	---	---

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

Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0900854 **Received** : 21 Mar 2024  
**Lab Number** : 06124910 **Tested** : 22 Mar 2024  
**Unique Number** : 10939061 **Diagnosed** : 26 Mar 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

Certificate L2367  
 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)