



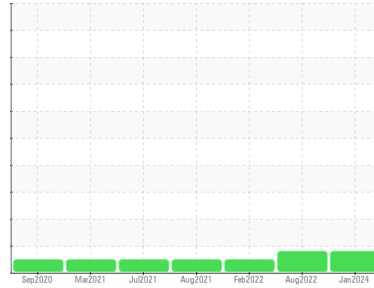
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**PLOGER**  
 Machine Id  
**118 - PLOGER**  
 Component  
**Rear Differential**  
 Fluid  
**{not provided} (--- GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 6 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>WC0900845</b>	WC0728464	WC0666381
Sample Date	Client Info		<b>23 Jan 2024</b>	09 Aug 2022	19 Feb 2022
Machine Age	mls Client Info		<b>536398</b>	494491	440186
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>	ATTENTION	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>500	<b>139</b>	108	110
Chromium	ppm ASTM D5185m	>10	<b>1</b>	2	1
Nickel	ppm ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m		<b>5</b>	5	5
Silver	ppm ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm ASTM D5185m	>25	<b>0</b>	3	2
Lead	ppm ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm ASTM D5185m	>100	<b>2</b>	2	2
Tin	ppm ASTM D5185m	>10	<b>&lt;1</b>	0	0
Antimony	ppm ASTM D5185m	>5	<b>---</b>	---	0
Vanadium	ppm ASTM D5185m		<b>0</b>	1	0
Cadmium	ppm ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m		<b>68</b>	70	83
Barium	ppm ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm ASTM D5185m		<b>4</b>	4	4
Magnesium	ppm ASTM D5185m		<b>154</b>	163	189
Calcium	ppm ASTM D5185m		<b>1</b>	0	2
Phosphorus	ppm ASTM D5185m		<b>1524</b>	1596	1714
Zinc	ppm ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm ASTM D5185m		<b>25275</b>	25056	19803

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>75	<b>9</b>	9	8
Sodium	ppm ASTM D5185m		<b>3</b>	3	2
Potassium	ppm ASTM D5185m	>20	<b>0</b>	1	<1
Water	% ASTM D6304	>.2	<b>0.032</b>	0.048	0.023
ppm Water	ppm ASTM D6304	>2000	<b>329</b>	489.6	235.7

## FLUID CLEANLINESS

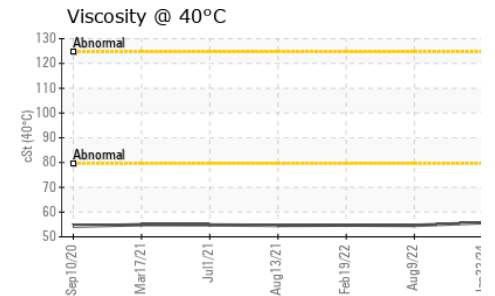
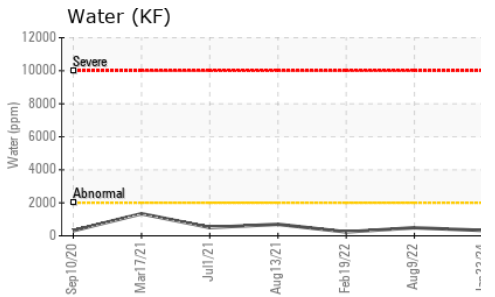
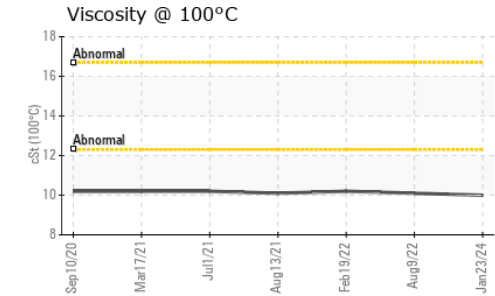
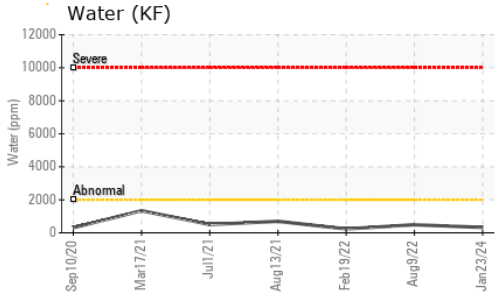
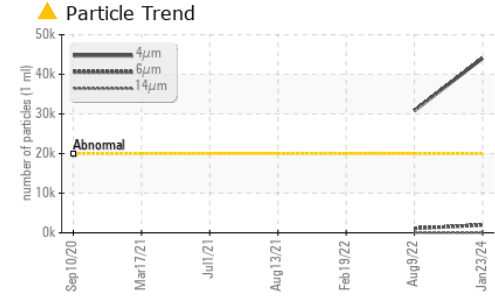
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 44049</b>	● 30827	---
Particles >6µm	ASTM D7647	>5000	<b>1953</b>	1121	---
Particles >14µm	ASTM D7647	>640	<b>51</b>	50	---
Particles >21µm	ASTM D7647	>160	<b>10</b>	19	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	1	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/18/13</b>	● 22/17/13	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045		<b>0.72</b>	0.52	0.54



# OIL ANALYSIS REPORT

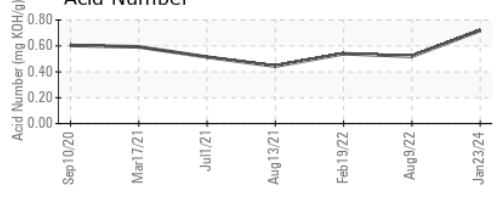
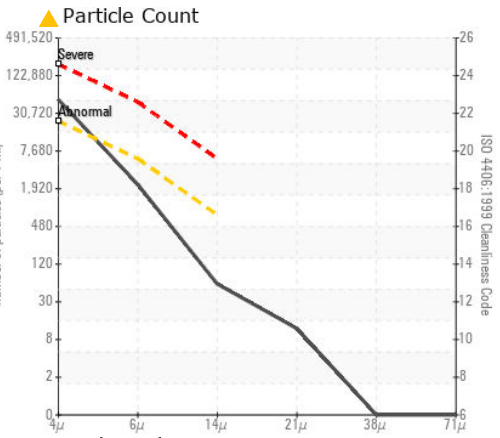
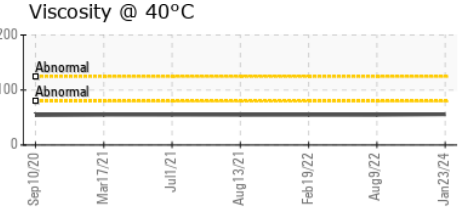
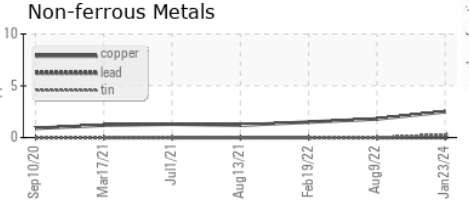
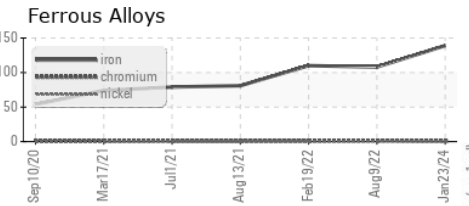


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	55.7	54.6	54.7
Visc @ 100°C	cSt	ASTM D445	10.0	10.1	10.2
Viscosity Index (VI)	Scale	ASTM D2270	168	175	177

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0900845 **Received** : 21 Mar 2024  
**Lab Number** : 06124908 **Tested** : 22 Mar 2024  
**Unique Number** : 10939059 **Diagnosed** : 26 Mar 2024 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**BASF - GIANNA CREDAROLI**  
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 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)