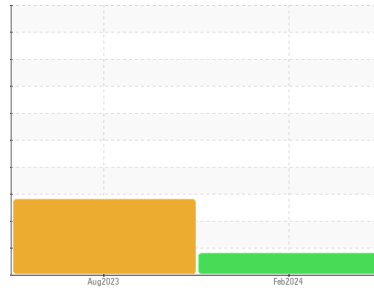




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**DAYTON FREIGHT**  
 Machine Id  
**DAYTON FREIGHT 423809**  
 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. 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 moderate 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>WC0900802</b>	WC0853840	---
Sample Date	Client Info			<b>29 Feb 2024</b>	22 Aug 2023	---
Machine Age	mls	Client Info		<b>123769</b>	17466	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>ATTENTION</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	<b>135</b>	110	---
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	2	---
Nickel	ppm	ASTM D5185m	>10	<b>4</b>	1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	0	---
Lead	ppm	ASTM D5185m	>25	<b>3</b>	1	---
Copper	ppm	ASTM D5185m	>100	<b>29</b>	19	---
Tin	ppm	ASTM D5185m	>10	<b>3</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>111</b>	112	---
Barium	ppm	ASTM D5185m		<b>2</b>	1	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m		<b>8</b>	8	---
Magnesium	ppm	ASTM D5185m		<b>173</b>	170	---
Calcium	ppm	ASTM D5185m		<b>13</b>	10	---
Phosphorus	ppm	ASTM D5185m		<b>1831</b>	1663	---
Zinc	ppm	ASTM D5185m		<b>6</b>	3	---
Sulfur	ppm	ASTM D5185m		<b>28734</b>	28280	---

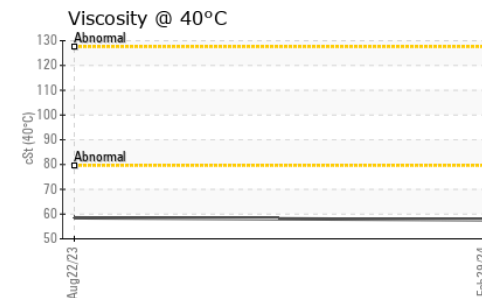
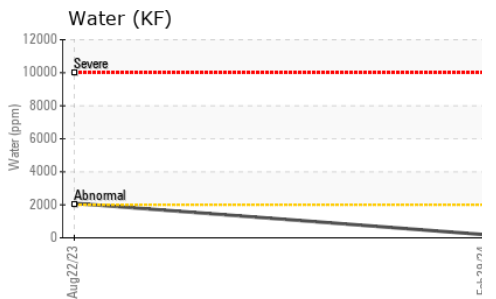
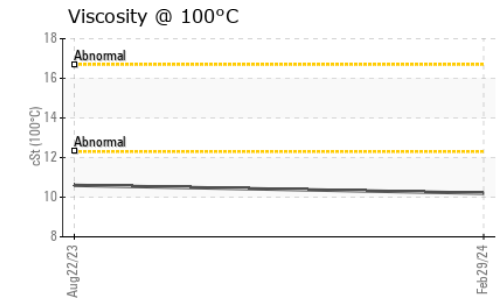
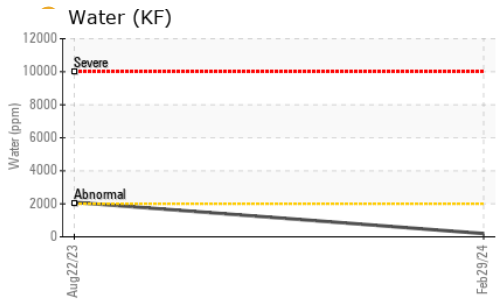
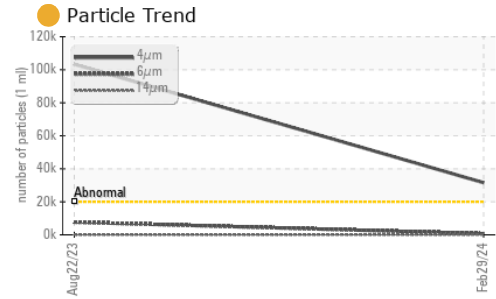
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	<b>28</b>	25	---
Sodium	ppm	ASTM D5185m		<b>3</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	---
Water	%	ASTM D6304	>.2	<b>0.019</b>	▲ 0.209	---
ppm Water	ppm	ASTM D6304	>2000	<b>199</b>	▲ 2090	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	● <b>31560</b>	▲ 103335	---
Particles >6µm		ASTM D7647	>5000	<b>687</b>	● 7678	---
Particles >14µm		ASTM D7647	>640	<b>38</b>	40	---
Particles >21µm		ASTM D7647	>160	<b>22</b>	7	---
Particles >38µm		ASTM D7647	>40	<b>4</b>	0	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● <b>22/17/12</b>	▲ 24/20/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.75</b>	0.65	---



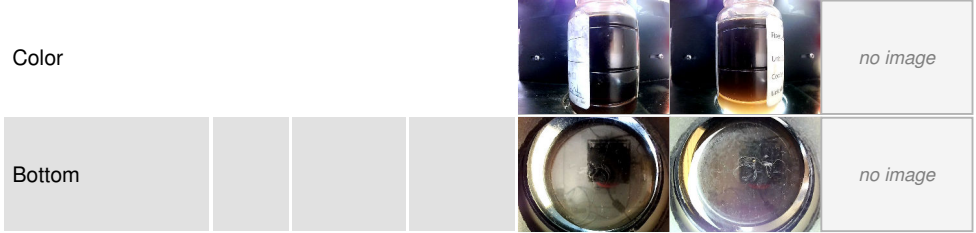
# OIL ANALYSIS REPORT



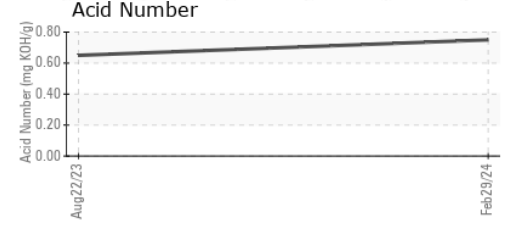
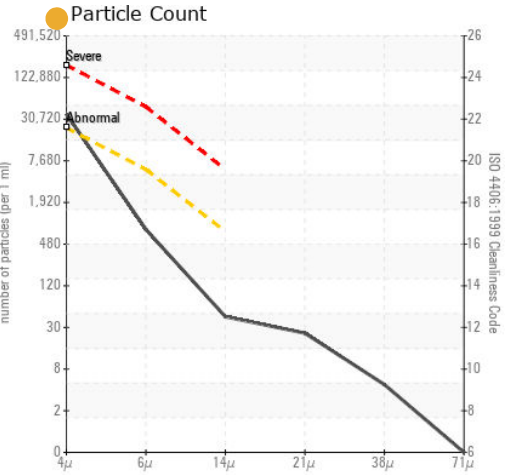
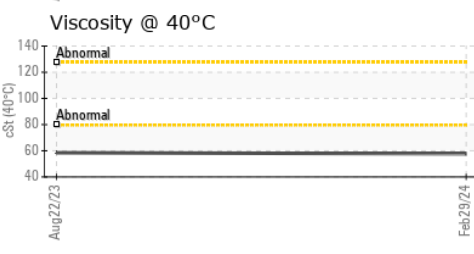
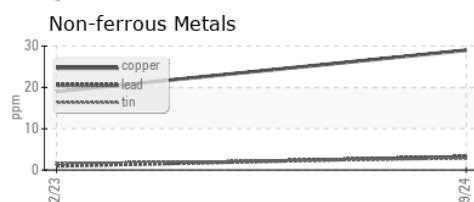
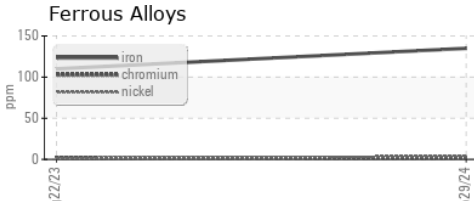
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	LIGHT	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>.2	NEG	0.2%
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.7	58.5	---
Visc @ 100°C	cSt	ASTM D445	10.2	10.6	---
Viscosity Index (VI)	Scale	ASTM D2270	166	173	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0900802      **Received** : 12 Apr 2024  
**Lab Number** : 06148065      **Tested** : 15 Apr 2024  
**Unique Number** : 10978143      **Diagnosed** : 17 Apr 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

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)