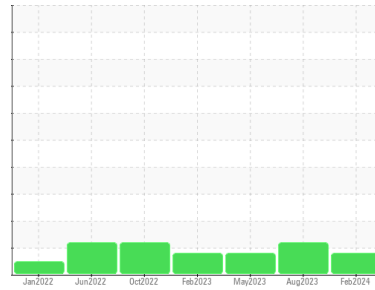




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Area  
**DICK LAVY**  
 Machine Id  
**DICK LAVY 4864**  
 Component  
**Rear Differential**  
 Fluid  
**Differential Oil (--- 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>WC0900807</b>	WC0853905	WC0828541
Sample Date	Client Info			<b>12 Feb 2024</b>	30 Aug 2023	20 May 2023
Machine Age	mls Client Info			<b>301134</b>	237469	192818
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>ATTENTION</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	<b>152</b>	116	107
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>262</b>	227	220
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>8</b>	6	7
Magnesium	ppm	ASTM D5185m		<b>6</b>	1	<1
Calcium	ppm	ASTM D5185m		<b>8</b>	5	4
Phosphorus	ppm	ASTM D5185m		<b>1633</b>	1457	1531
Zinc	ppm	ASTM D5185m		<b>4</b>	0	2
Sulfur	ppm	ASTM D5185m		<b>27463</b>	22334	29205

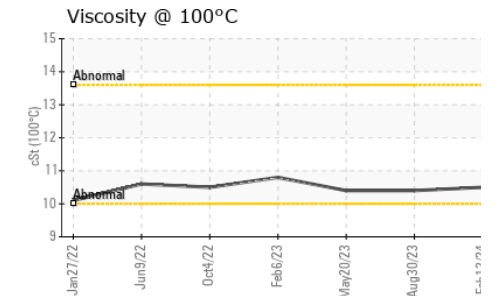
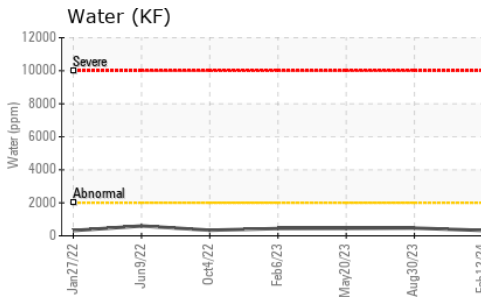
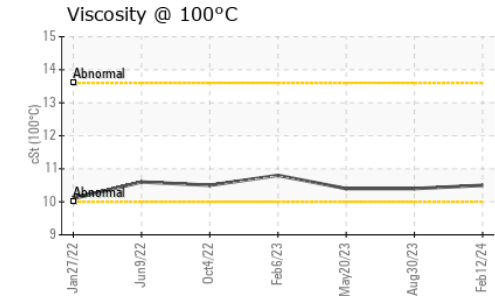
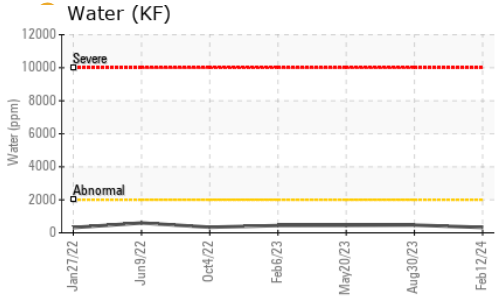
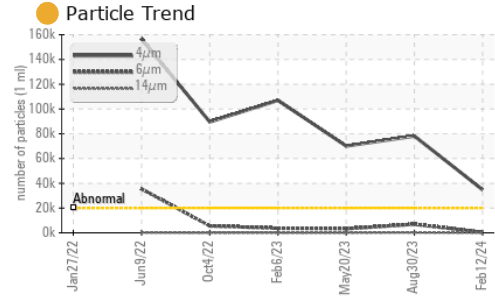
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	<b>28</b>	24	15
Sodium	ppm	ASTM D5185m		<b>2</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Water	%	ASTM D6304	>.2	<b>0.032</b>	0.047	0.045
ppm Water	ppm	ASTM D6304	>2000	<b>327</b>	471.4	450.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>34759</b>	78136	70096
Particles >6µm		ASTM D7647	>5000	<b>408</b>	6958	3298
Particles >14µm		ASTM D7647	>640	<b>4</b>	177	11
Particles >21µm		ASTM D7647	>160	<b>2</b>	45	1
Particles >38µm		ASTM D7647	>40	<b>0</b>	3	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>22/16/9</b>	23/20/15	23/19/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>2.62</b>	2.26	2.11



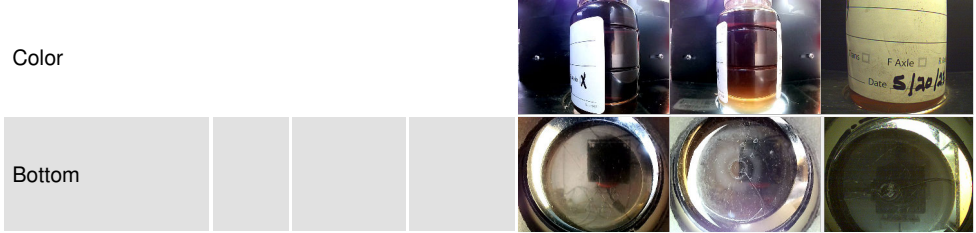
# OIL ANALYSIS REPORT



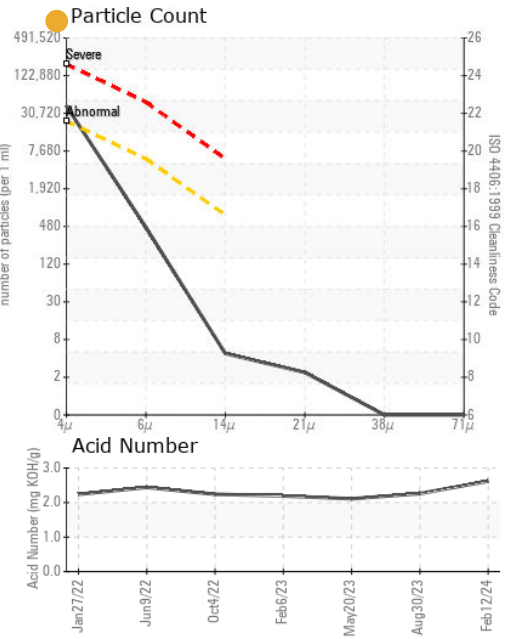
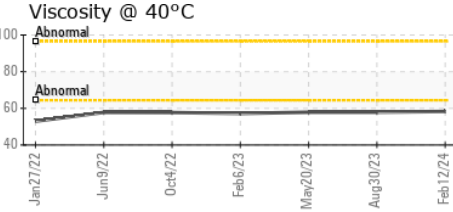
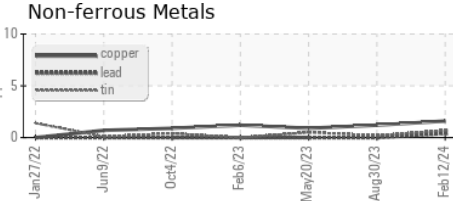
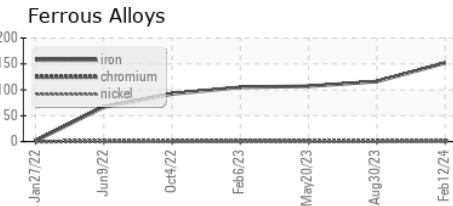
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	58.3	57.9	57.9
Visc @ 100°C	cSt	ASTM D445	10.5	10.4	10.4
Viscosity Index (VI)	Scale	ASTM D2270	171	170	170

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0900807 **Received** : 12 Apr 2024  
**Lab Number** : 06148064 **Tested** : 15 Apr 2024  
**Unique Number** : 10978142 **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)