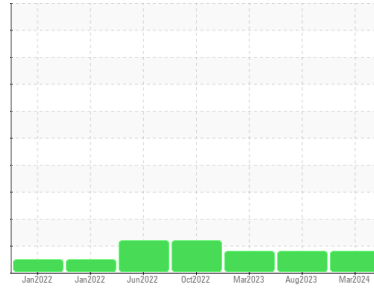




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**DICK LAVY**  
 Machine Id  
**DICK LAVY 4860**  
 Component  
**Rear Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory elemental data updates.

### 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>WC0900739</b>	WC0853895	WC0815536
Sample Date	Client Info		<b>25 Mar 2024</b>	17 Aug 2023	30 Mar 2023
Machine Age	mls	Client Info	<b>250825</b>	190726	145311
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>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>102</b>	92	83
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	1	0
Lead	ppm	ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >100	<b>1</b>	<1	1
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	<b>228</b>	208	279
Barium	ppm	ASTM D5185m 200	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 12	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>5</b>	4	4
Magnesium	ppm	ASTM D5185m 12	<b>3</b>	2	1
Calcium	ppm	ASTM D5185m 150	<b>13</b>	2	2
Phosphorus	ppm	ASTM D5185m 1650	<b>1451</b>	1472	1429
Zinc	ppm	ASTM D5185m 125	<b>5</b>	0	4
Sulfur	ppm	ASTM D5185m 22500	<b>28310</b>	23687	23917

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>19</b>	16	11
Sodium	ppm	ASTM D5185m	<b>4</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>3</b>	<1	2
Water	%	ASTM D6304 >.2	<b>0.049</b>	0.058	0.044
ppm Water	ppm	ASTM D6304 >2000	<b>498</b>	580.2	448.0

## FLUID CLEANLINESS

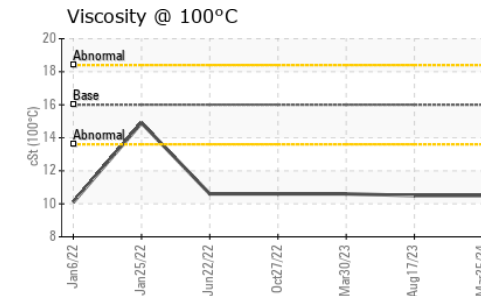
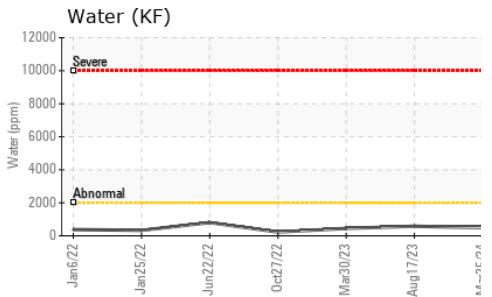
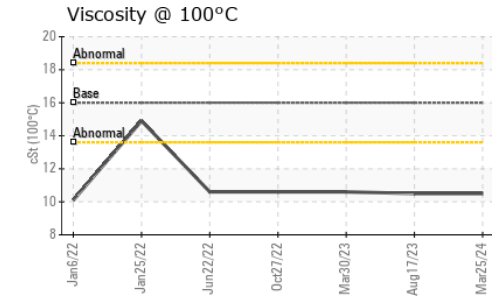
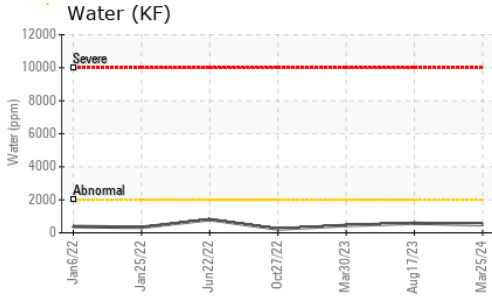
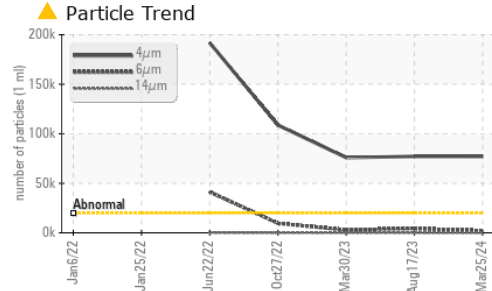
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 77091</b>	▲ 77132	▲ 75856
Particles >6µm	ASTM D7647	>5000	<b>2068</b>	4268	2861
Particles >14µm	ASTM D7647	>640	<b>18</b>	19	30
Particles >21µm	ASTM D7647	>160	<b>4</b>	4	10
Particles >38µm	ASTM D7647	>40	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/18/11</b>	▲ 23/19/11	▲ 23/19/12

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.00	<b>2.59</b>	2.71	2.40



# OIL ANALYSIS REPORT

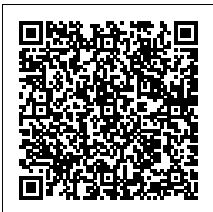
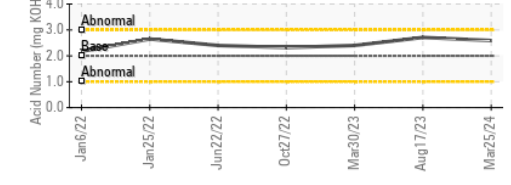
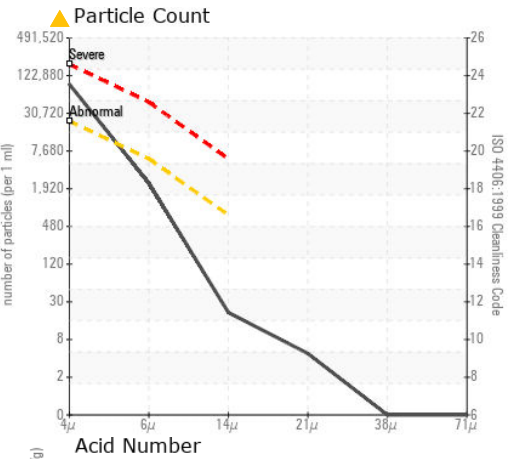
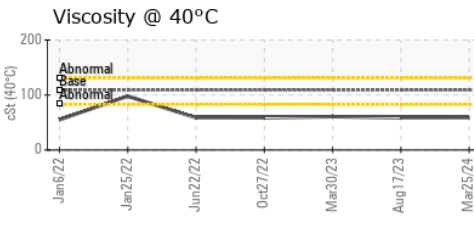
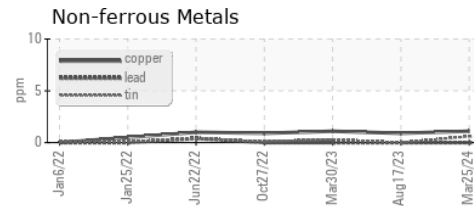
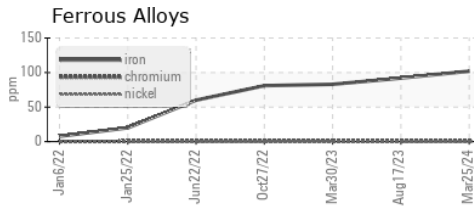


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	109	58.9	58.6
Visc @ 100°C	cSt	ASTM D445	16.0	10.5	10.6
Viscosity Index (VI)	Scale	ASTM D2270	157	169	170

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0900739 **Received** : 14 May 2024  
**Lab Number** : 06179355 **Tested** : 16 May 2024  
**Unique Number** : 11030681 **Diagnosed** : 16 May 2024 - Angela Borella  
**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)