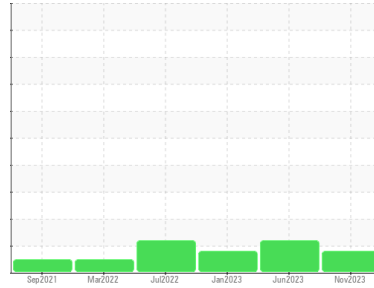




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**DICK LAVY**  
 Machine Id  
**DICK LAVY 4835**  
 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.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 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>WC0876044</b>	WC0828766	WC0771206
Sample Date	Client Info		<b>20 Nov 2023</b>	24 Jun 2023	05 Jan 2023
Machine Age	mls	Client Info	<b>327052</b>	270439	208827
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>141</b>	130	111
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	1	1
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>	<1	<1
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>87</b>	98	91
Barium	ppm	ASTM D5185m	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>7</b>	7	6
Magnesium	ppm	ASTM D5185m	<b>147</b>	161	153
Calcium	ppm	ASTM D5185m	<b>0</b>	4	7
Phosphorus	ppm	ASTM D5185m	<b>1649</b>	1634	1507
Zinc	ppm	ASTM D5185m	<b>0</b>	0	8
Sulfur	ppm	ASTM D5185m	<b>23550</b>	25056	25984

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>38</b>	29	23
Sodium	ppm	ASTM D5185m	<b>3</b>	3	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	<1
Water	%	ASTM D6304 >.2	<b>0.027</b>	0.052	0.021
ppm Water	ppm	ASTM D6304 >2000	<b>272</b>	524.5	216.7

## FLUID CLEANLINESS

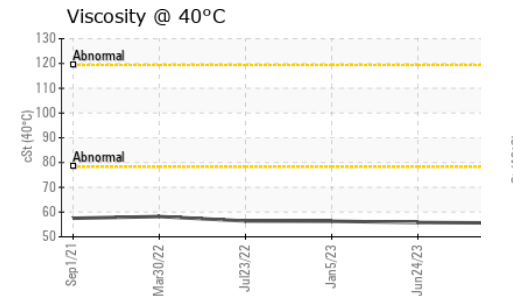
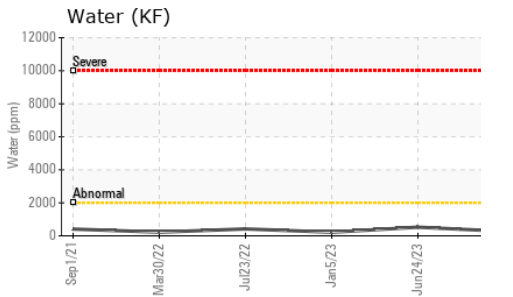
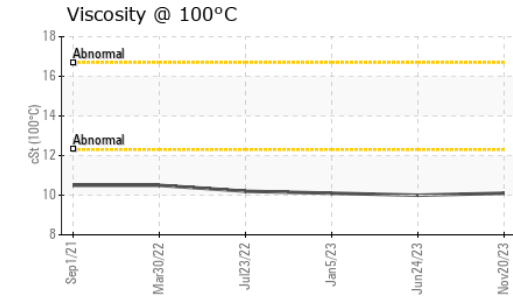
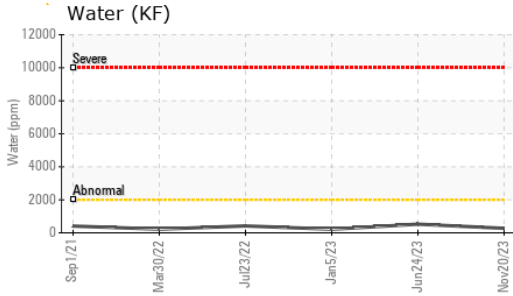
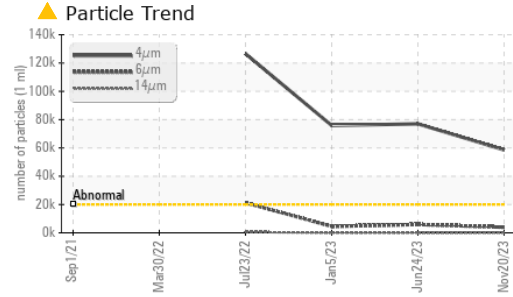
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 58570</b>	▲ 77008	▲ 75854
Particles >6µm	ASTM D7647	>5000	<b>▲ 3951</b>	▲ 5905	4547
Particles >14µm	ASTM D7647	>640	<b>137</b>	17	22
Particles >21µm	ASTM D7647	>160	<b>37</b>	5	6
Particles >38µm	ASTM D7647	>40	<b>1</b>	0	5
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	5
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/19/14</b>	▲ 23/20/11	▲ 23/19/12

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.21</b>	0.79	0.77



# OIL ANALYSIS REPORT

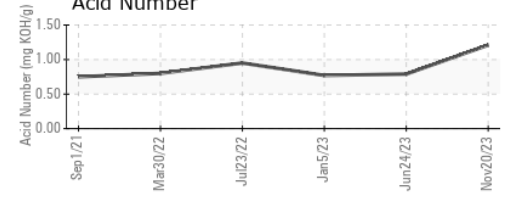
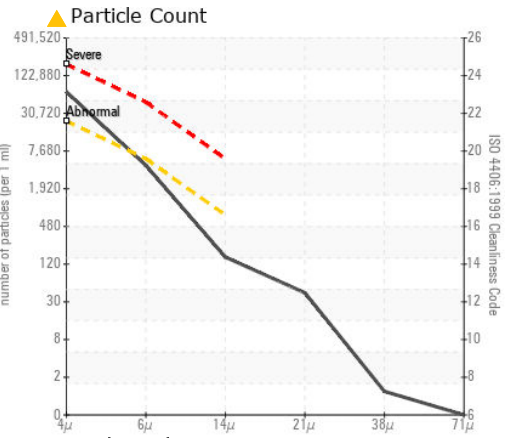
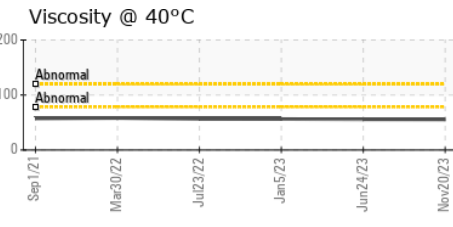
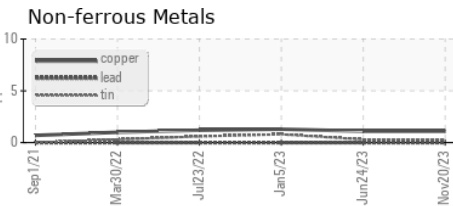
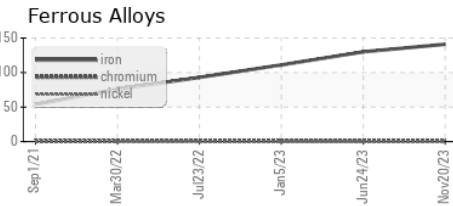


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	55.6	55.8	56.3
Visc @ 100°C	cSt	ASTM D445	10.1	10.0	10.1
Viscosity Index (VI)	Scale	ASTM D2270	171	167	168

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0876044 **Received** : 16 Jan 2024  
**Lab Number** : 06061052 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832434 **Diagnostician** : Don Baldrige  
**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)

T:  
F: