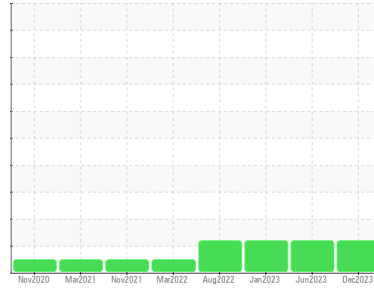




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**DICK LAVY**  
Machine Id  
**DICK LAVY 4827**  
Component  
**Front 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.

### 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>WC0876049</b>	WC0828761	WC0771155
Sample Date	Client Info		<b>24 Dec 2023</b>	20 Jun 2023	15 Jan 2023
Machine Age	mls	Client Info	<b>350496</b>	292275	242011
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>146</b>	135	128
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	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	1	2
Lead	ppm	ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >100	<b>1</b>	1	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	<b>263</b>	279	278
Barium	ppm	ASTM D5185m 200	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m 12	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>10</b>	10	10
Magnesium	ppm	ASTM D5185m 12	<b>0</b>	2	<1
Calcium	ppm	ASTM D5185m 150	<b>0</b>	5	7
Phosphorus	ppm	ASTM D5185m 1650	<b>1349</b>	1228	1243
Zinc	ppm	ASTM D5185m 125	<b>3</b>	10	17
Sulfur	ppm	ASTM D5185m 22500	<b>22702</b>	25056	25393

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>41</b>	32	30
Sodium	ppm	ASTM D5185m	<b>5</b>	5	4
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	1
Water	%	ASTM D6304 >.2	<b>0.025</b>	0.036	0.004
ppm Water	ppm	ASTM D6304 >2000	<b>253</b>	361.3	41.6

## FLUID CLEANLINESS

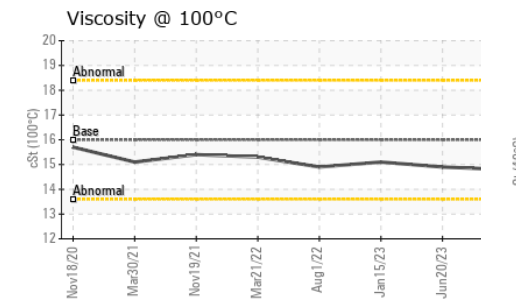
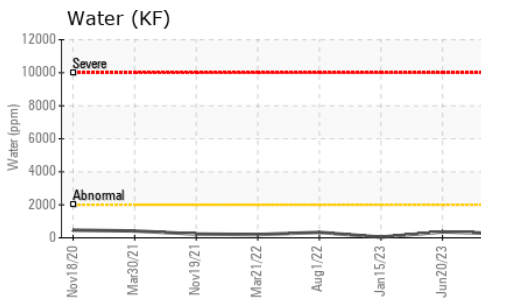
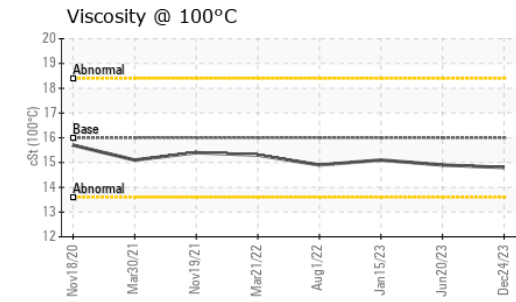
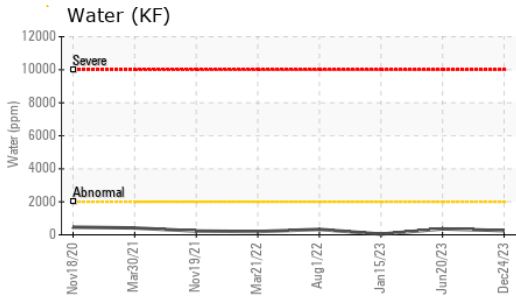
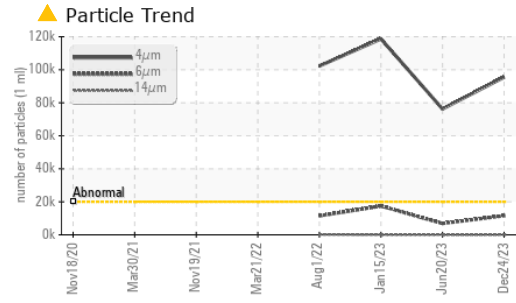
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 95487</b>	▲ 76249	▲ 118657
Particles >6µm	ASTM D7647	>5000	<b>▲ 11550</b>	▲ 6861	▲ 17469
Particles >14µm	ASTM D7647	>640	<b>66</b>	24	32
Particles >21µm	ASTM D7647	>160	<b>8</b>	5	2
Particles >38µm	ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 24/21/13</b>	▲ 23/20/12	▲ 24/21/12

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.00	<b>2.50</b>	2.13	1.99



# OIL ANALYSIS REPORT

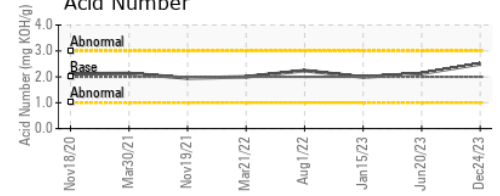
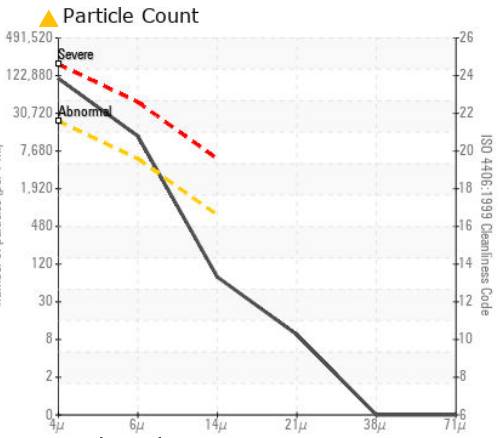
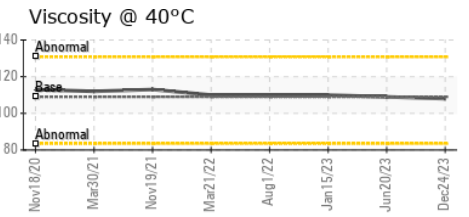
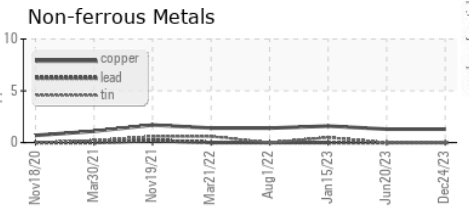
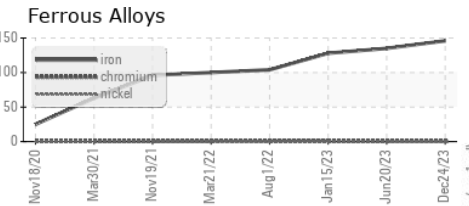


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	109	109	110
Visc @ 100°C	cSt	ASTM D445	16.0	14.9	15.1
Viscosity Index (VI)	Scale	ASTM D2270	157	141	143

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0876049 **Received** : 16 Jan 2024  
**Lab Number** : 06061059 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832441 **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)