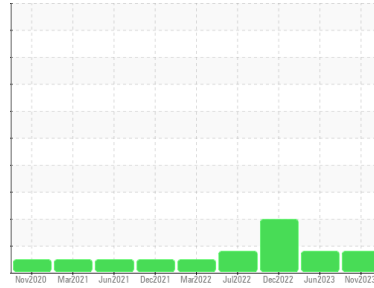




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
DICK LAVY
Machine Id
DICK LAVY 4825
Component
Rear Differential
Fluid
GEAR OIL SAE 75W90 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a light 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		WC0853969	WC0828758	WC0765828
Sample Date	Client Info		04 Nov 2023	03 Jun 2023	15 Dec 2022
Machine Age	mls Client Info		402624	347036	291443
Oil Age	mls Client Info		0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>500	123	117	105
Chromium	ppm ASTM D5185m	>10	1	<1	<1
Nickel	ppm ASTM D5185m	>10	<1	0	0
Titanium	ppm ASTM D5185m		<1	<1	<1
Silver	ppm ASTM D5185m		0	0	0
Aluminum	ppm ASTM D5185m	>25	2	2	2
Lead	ppm ASTM D5185m	>25	0	<1	0
Copper	ppm ASTM D5185m	>100	2	2	2
Tin	ppm ASTM D5185m	>10	<1	0	<1
Vanadium	ppm ASTM D5185m		0	<1	0
Cadmium	ppm ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	400	455	397	388
Barium	ppm ASTM D5185m	200	0	0	<1
Molybdenum	ppm ASTM D5185m	12	<1	0	<1
Manganese	ppm ASTM D5185m		8	8	8
Magnesium	ppm ASTM D5185m	12	2	6	1
Calcium	ppm ASTM D5185m	150	12	9	12
Phosphorus	ppm ASTM D5185m	1650	1331	1267	1275
Zinc	ppm ASTM D5185m	125	3	15	12
Sulfur	ppm ASTM D5185m	22500	24316	24920	24876

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>75	38	29	29
Sodium	ppm ASTM D5185m		4	6	5
Potassium	ppm ASTM D5185m	>20	124	118	127
Water	% ASTM D6304	>.2	0.031	0.030	0.021
ppm Water	ppm ASTM D6304	>2000	313	306.4	212.7

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 21026	▲ 34961	▲ 135425
Particles >6µm	ASTM D7647	>5000	686	1266	▲ 49504
Particles >14µm	ASTM D7647	>640	13	14	▲ 2360
Particles >21µm	ASTM D7647	>160	4	3	▲ 534
Particles >38µm	ASTM D7647	>40	0	0	25
Particles >71µm	ASTM D7647	>10	0	0	1
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 22/17/11	▲ 22/17/11	▲ 24/23/18

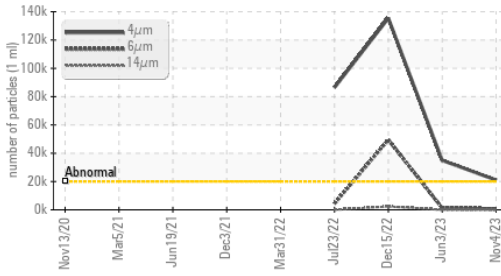
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	2.00	1.70	2.00	2.31

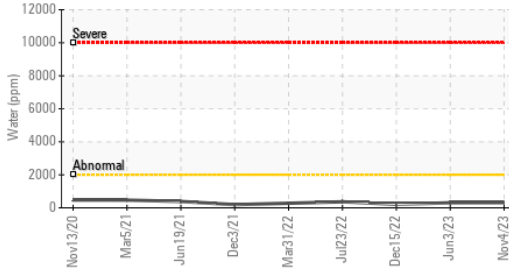


OIL ANALYSIS REPORT

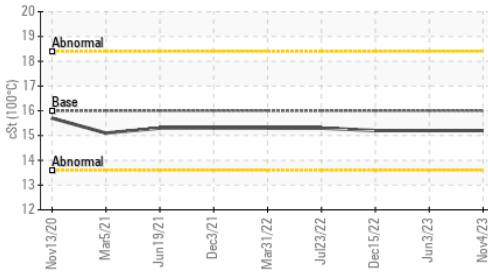
Particle Trend



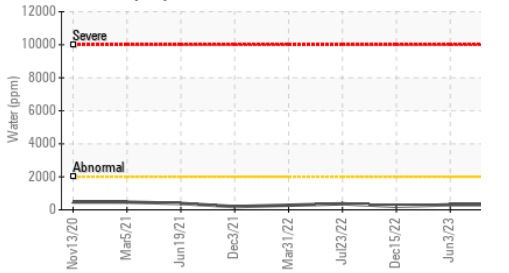
Water (KF)



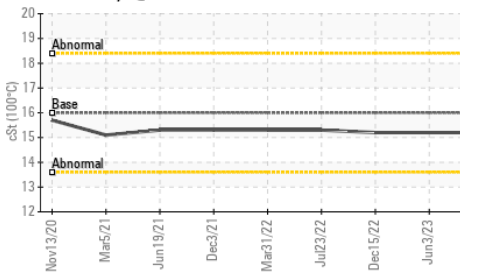
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
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	113	112
Visc @ 100°C	cSt	ASTM D445	16.0	15.2	15.2
Viscosity Index (VI)	Scale	ASTM D2270	157	140	141

SAMPLE IMAGES

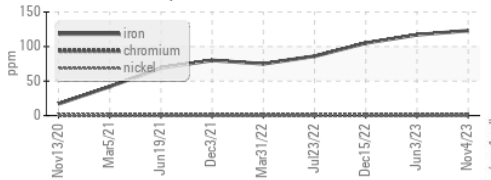
Color

Bottom

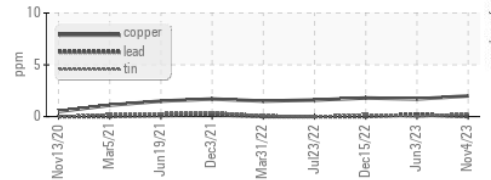


GRAPHS

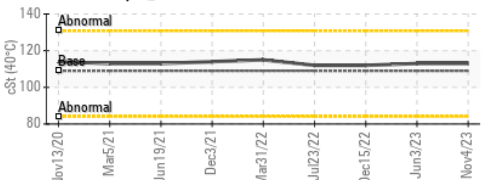
Ferrous Alloys



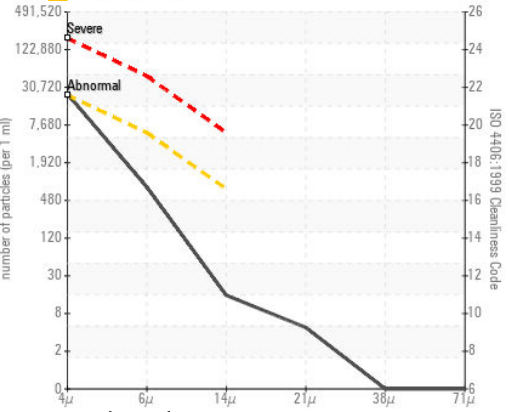
Non-ferrous Metals



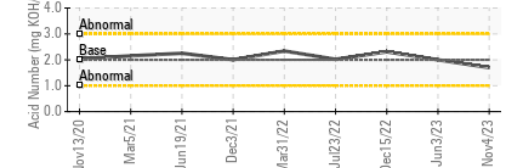
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0853969 **Received** : 21 Nov 2023
Lab Number : 06014536 **Diagnosed** : 24 Nov 2023
Unique Number : 10753680 **Diagnostician** : Wes Davis
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: