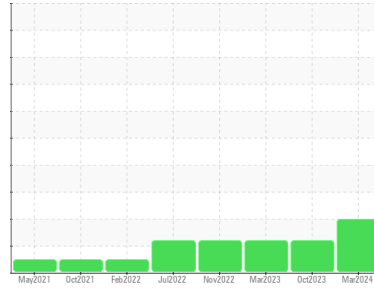




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
DICK LAVY
 Machine Id
DICK LAVY 4833
 Component
Front Differential
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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		WC0900824	WC0853912	WC0815590
Sample Date	Client Info		04 Mar 2024	02 Oct 2023	28 Mar 2023
Machine Age	mls	Client Info	418956	358106	299474
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	236	203	197
Chromium	ppm	ASTM D5185m >10	2	1	1
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	3	1	2
Lead	ppm	ASTM D5185m >25	0	0	0
Copper	ppm	ASTM D5185m >100	2	1	1
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	78	82	85
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	10	10	10
Magnesium	ppm	ASTM D5185m	144	147	147
Calcium	ppm	ASTM D5185m	17	14	6
Phosphorus	ppm	ASTM D5185m	1548	1572	1611
Zinc	ppm	ASTM D5185m	5	0	0
Sulfur	ppm	ASTM D5185m	23268	21400	28052

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	29	26	23
Sodium	ppm	ASTM D5185m	2	2	2
Potassium	ppm	ASTM D5185m >20	19	16	17
Water	%	ASTM D6304 >.2	0.035	0.029	0.041
ppm Water	ppm	ASTM D6304 >2000	354	299.9	411.2

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 151762	▲ 126354	▲ 115344
Particles >6µm	ASTM D7647	>5000	▲ 68933	▲ 35011	▲ 15927
Particles >14µm	ASTM D7647	>640	▲ 2915	102	65
Particles >21µm	ASTM D7647	>160	▲ 483	19	7
Particles >38µm	ASTM D7647	>40	9	2	0
Particles >71µm	ASTM D7647	>10	0	1	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/23/19	▲ 24/22/14	▲ 24/21/13

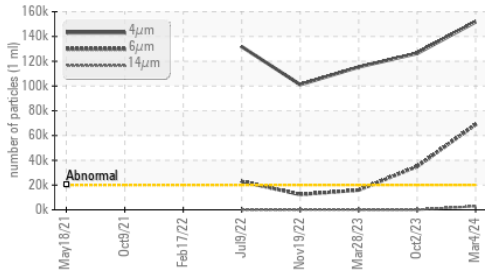
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.89	0.82	0.75

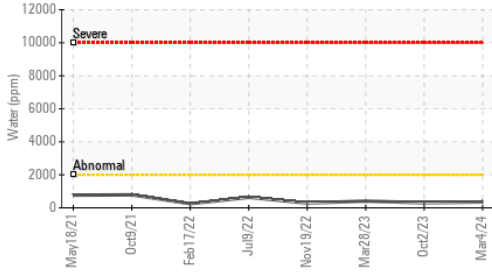


OIL ANALYSIS REPORT

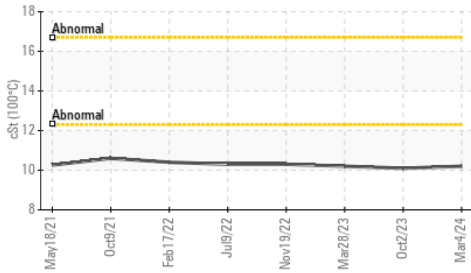
Particle Trend



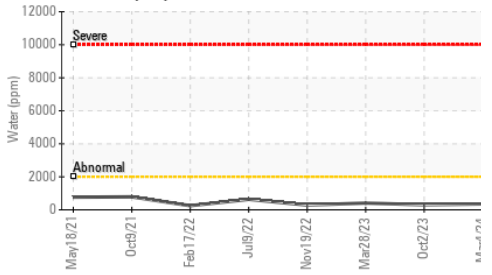
Water (KF)



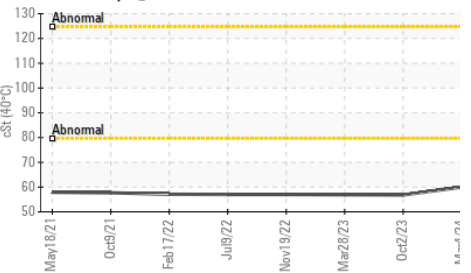
Viscosity @ 100°C



Water (KF)



Viscosity @ 40°C

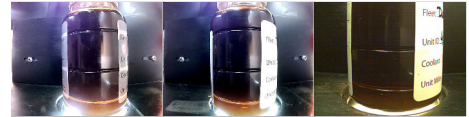


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

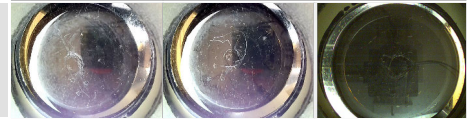
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	60.0	56.8	56.9
Visc @ 100°C	cSt	ASTM D445	10.2	10.1	10.2
Viscosity Index (VI)	Scale	ASTM D2270	158	166	169

SAMPLE IMAGES

Color

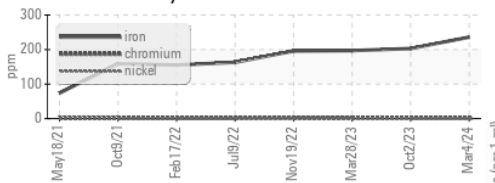


Bottom

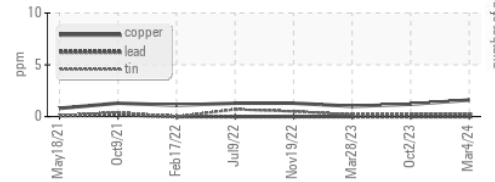


GRAPHS

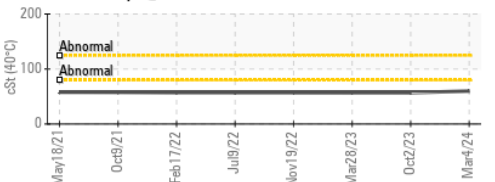
Ferrous Alloys



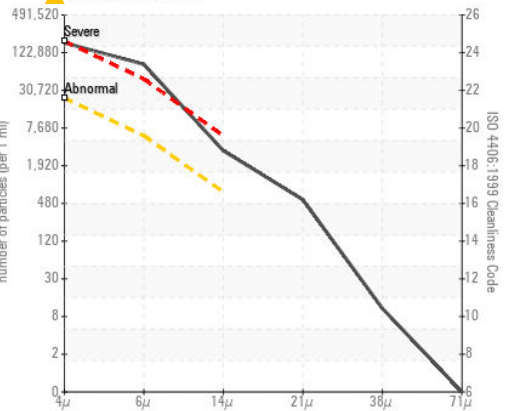
Non-ferrous Metals



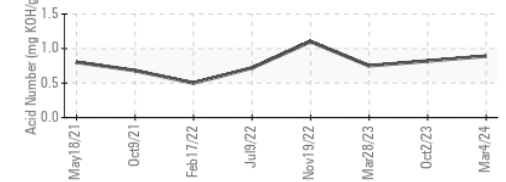
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900824 **Received** : 02 Apr 2024
Lab Number : 06136365 **Tested** : 03 Apr 2024
Unique Number : 10955830 **Diagnosed** : 04 Apr 2024 - 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: