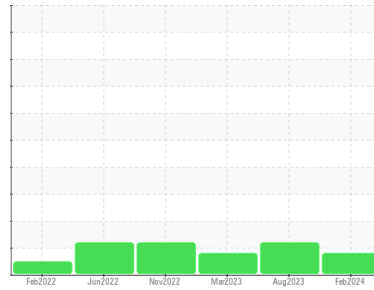




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
DICK LAVY
 Machine Id
DICK LAVY 4867
 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. Please specify the brand, type, and viscosity of the oil on your next sample.

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		WC0900805	WC0843233	WC0815532
Sample Date	Client Info		12 Feb 2024	07 Aug 2023	31 Mar 2023
Machine Age	mls	Client Info	254134	197340	151959
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	146	119	100
Chromium	ppm	ASTM D5185m >10	1	<1	<1
Nickel	ppm	ASTM D5185m >10	<1	0	<1
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	2	3	<1
Lead	ppm	ASTM D5185m >25	<1	0	0
Copper	ppm	ASTM D5185m >100	2	1	1
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	<1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	223	249	237
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	<1
Manganese	ppm	ASTM D5185m	6	5	4
Magnesium	ppm	ASTM D5185m	10	4	2
Calcium	ppm	ASTM D5185m	9	2	3
Phosphorus	ppm	ASTM D5185m	1673	1440	1430
Zinc	ppm	ASTM D5185m	5	6	6
Sulfur	ppm	ASTM D5185m	28590	25056	24266

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	30	25	16
Sodium	ppm	ASTM D5185m	2	3	0
Potassium	ppm	ASTM D5185m >20	2	3	2
Water	%	ASTM D6304 >.2	0.033	0.065	0.038
ppm Water	ppm	ASTM D6304 >2000	334	654.7	388.6

FLUID CLEANLINESS

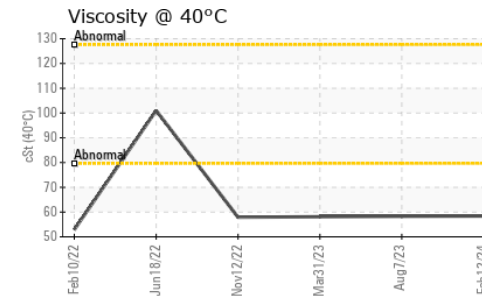
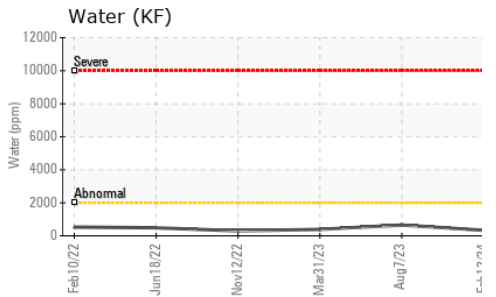
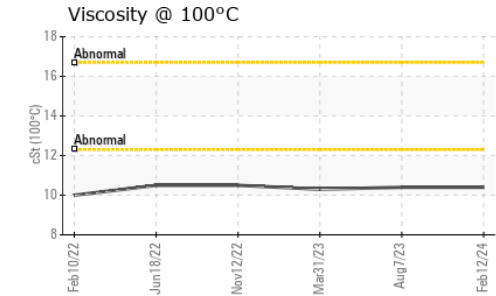
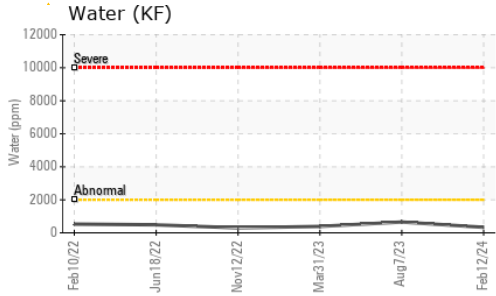
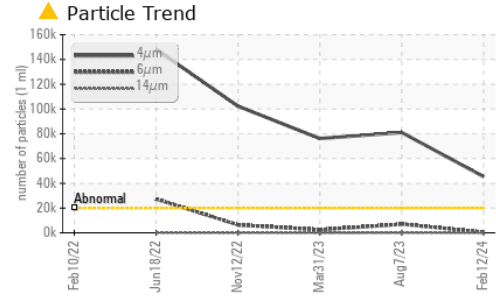
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 45335	▲ 81007	▲ 76157
Particles >6µm	ASTM D7647	>5000	462	● 6969	2514
Particles >14µm	ASTM D7647	>640	2	90	11
Particles >21µm	ASTM D7647	>160	1	18	2
Particles >38µm	ASTM D7647	>40	1	1	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/16/9	▲ 24/20/14	▲ 23/19/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.60	2.34	2.33



OIL ANALYSIS REPORT

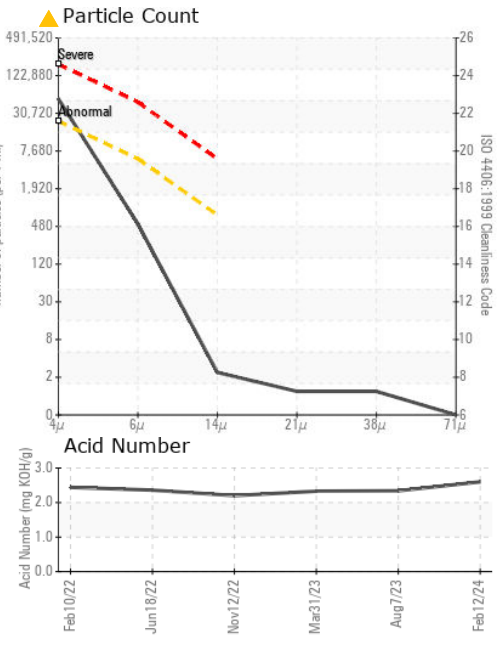
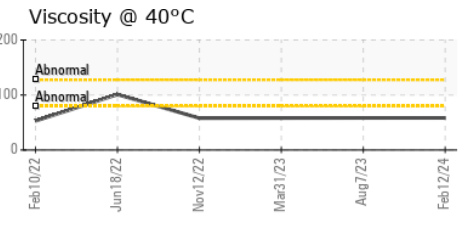
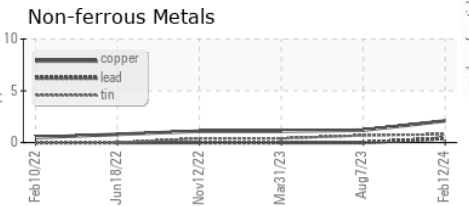
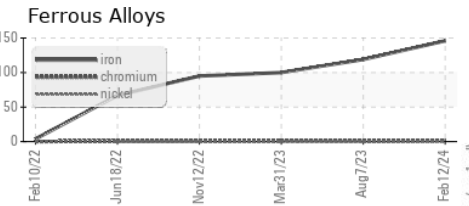


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	58.4	58.3	58.1
Visc @ 100°C	cSt	ASTM D445	10.4	10.4	10.3
Viscosity Index (VI)	Scale	ASTM D2270	168	169	167

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900805 **Received** : 12 Apr 2024
Lab Number : 06148060 **Tested** : 15 Apr 2024
Unique Number : 10978138 **Diagnosed** : 17 Apr 2024 - Jonathan Hester
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)