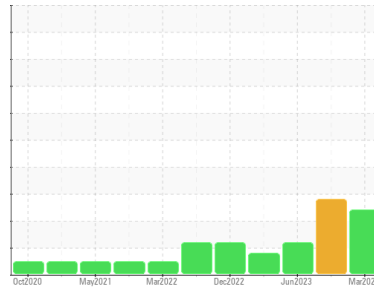




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area
DICK LAVY
 Machine Id
DICK LAVY 4821
 Component
Rear 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 < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal.

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	WC0900746	WC0853973	WC0828752	
Sample Date	Client Info	14 Mar 2024	23 Oct 2023	29 Jun 2023	
Machine Age	mls	Client Info	446085	446085	391396
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	166	170	151
Chromium	ppm	ASTM D5185m >10	<1	1	<1
Nickel	ppm	ASTM D5185m >10	<1	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	2	1
Lead	ppm	ASTM D5185m >25	0	0	0
Copper	ppm	ASTM D5185m >100	7	2	2
Tin	ppm	ASTM D5185m >10	2	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 400	276	319	289
Barium	ppm	ASTM D5185m 200	2	0	0
Molybdenum	ppm	ASTM D5185m 12	0	<1	0
Manganese	ppm	ASTM D5185m	10	9	8
Magnesium	ppm	ASTM D5185m 12	4	2	2
Calcium	ppm	ASTM D5185m 150	13	8	4
Phosphorus	ppm	ASTM D5185m 1650	1425	1365	1307
Zinc	ppm	ASTM D5185m 125	12	3	15
Sulfur	ppm	ASTM D5185m 22500	26159	24144	25056

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >75	▲ 78	▲ 86	61
Sodium	ppm	ASTM D5185m	6	5	5
Potassium	ppm	ASTM D5185m >20	4	3	4
Water	%	ASTM D6304 >.2	0.036	0.037	0.028
ppm Water	ppm	ASTM D6304 >2000	368	376	280.8

FLUID CLEANLINESS

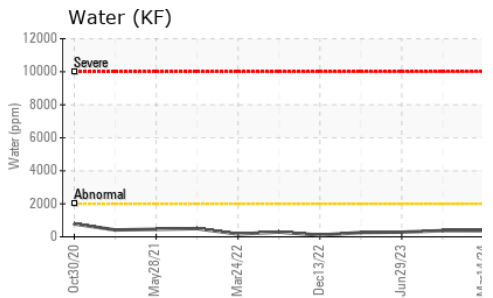
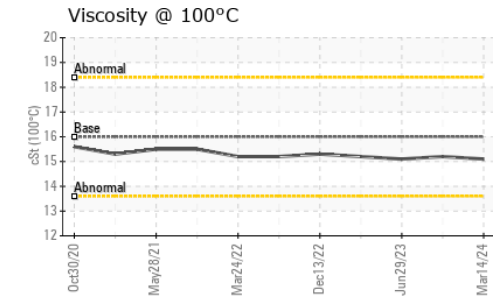
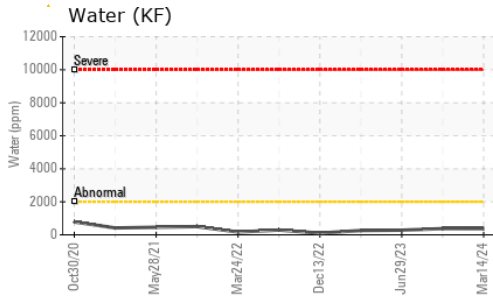
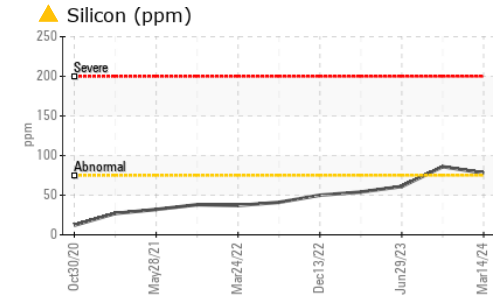
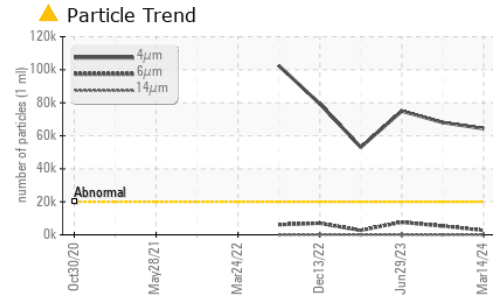
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	▲ 64315	▲ 68041	▲ 74951
Particles >6µm	ASTM D7647 >5000	2670	● 5301	● 7669
Particles >14µm	ASTM D7647 >640	32	65	66
Particles >21µm	ASTM D7647 >160	8	12	12
Particles >38µm	ASTM D7647 >40	0	0	1
Particles >71µm	ASTM D7647 >10	0	0	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	▲ 23/19/12	▲ 23/20/13	▲ 23/20/13

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 2.00	2.24	1.95	2.15



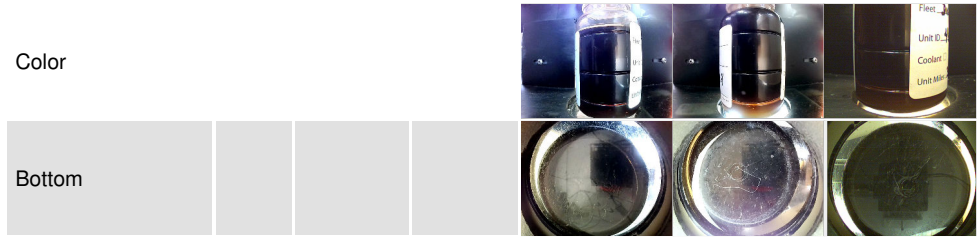
OIL ANALYSIS REPORT



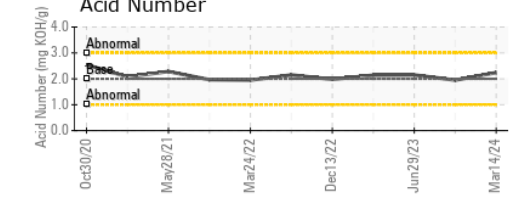
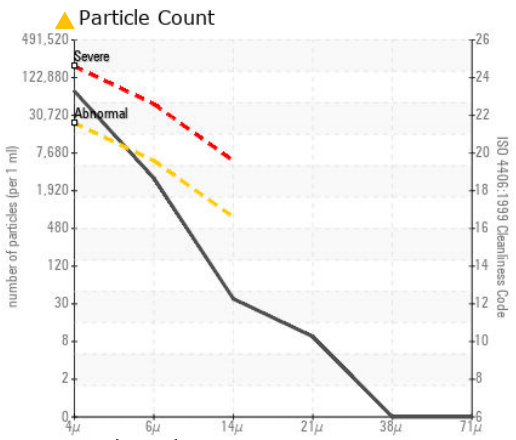
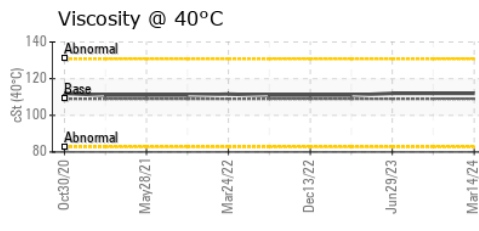
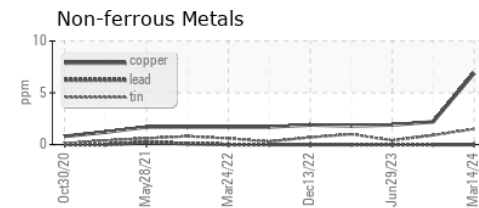
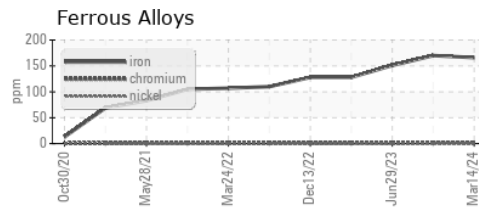
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	109	112	112
Visc @ 100°C	cSt	ASTM D445	16.0	15.1	15.1
Viscosity Index (VI)	Scale	ASTM D2270	157	140	140

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900746 **Received** : 14 May 2024
Lab Number : 06179366 **Tested** : 16 May 2024
Unique Number : 11030692 **Diagnosed** : 16 May 2024 - Angela Borella
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)