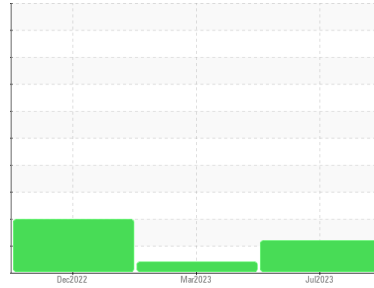




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
WALPOLE
Machine Id
941 - WALPOLE
Component
Rear Differential
Fluid
NOT GIVEN (--- 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.

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		WC0828729	WC0815597	WC0797115
Sample Date	Client Info		11 Jul 2023	22 Mar 2023	05 Dec 2022
Machine Age	mls	Client Info	118161	76823	35714
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	183	151	151
Chromium	ppm	ASTM D5185m >10	3	3	2
Nickel	ppm	ASTM D5185m >10	<1	1	<1
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	9	5	2
Lead	ppm	ASTM D5185m >25	0	0	2
Copper	ppm	ASTM D5185m >100	1	<1	34
Tin	ppm	ASTM D5185m >10	<1	<1	4
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	68	49
Barium	ppm	ASTM D5185m	0	0	1
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	10	8	8
Magnesium	ppm	ASTM D5185m	180	179	161
Calcium	ppm	ASTM D5185m	7	6	3
Phosphorus	ppm	ASTM D5185m	1675	1587	1494
Zinc	ppm	ASTM D5185m	14	14	7
Sulfur	ppm	ASTM D5185m	25441	25470	24028

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	44	39	40
Sodium	ppm	ASTM D5185m	0	<1	5
Potassium	ppm	ASTM D5185m >20	1	2	0
Water	%	ASTM D6304 >.2	0.045	0.015	0.024
ppm Water	ppm	ASTM D6304 >2000	456.3	153.1	244.7

FLUID CLEANLINESS

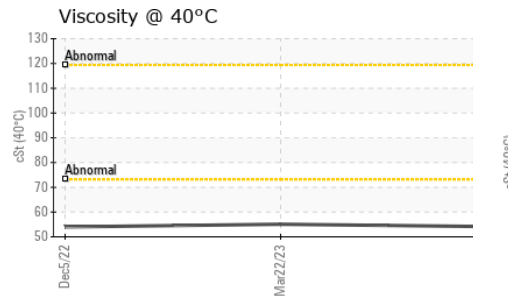
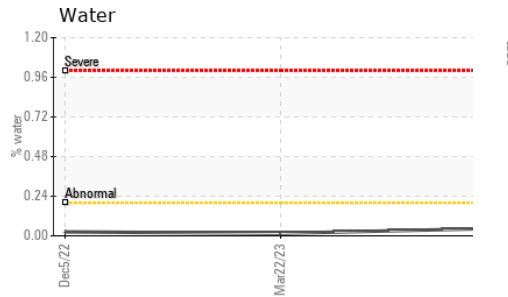
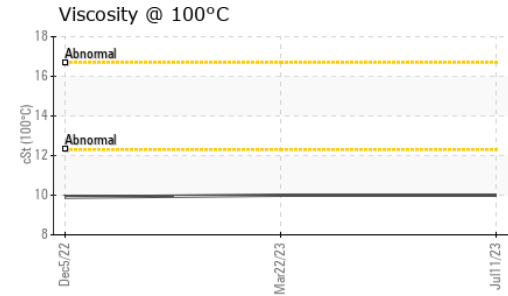
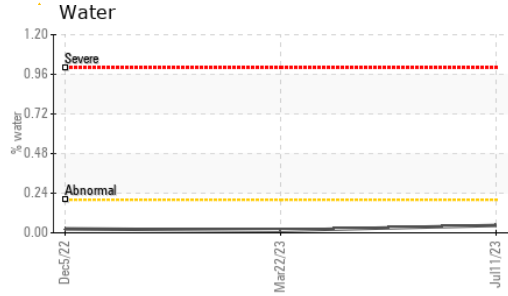
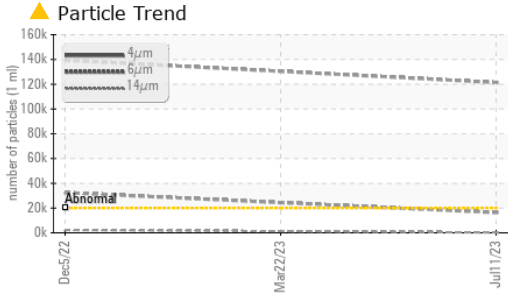
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 121397	---	▲ 139426
Particles >6µm	ASTM D7647	>5000	▲ 16327	---	▲ 32485
Particles >14µm	ASTM D7647	>640	218	---	▲ 2271
Particles >21µm	ASTM D7647	>160	44	---	▲ 675
Particles >38µm	ASTM D7647	>40	1	---	33
Particles >71µm	ASTM D7647	>10	0	---	1
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/21/15	---	▲ 24/22/18

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.64	0.57	0.45



OIL ANALYSIS REPORT

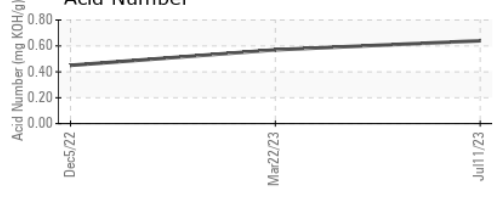
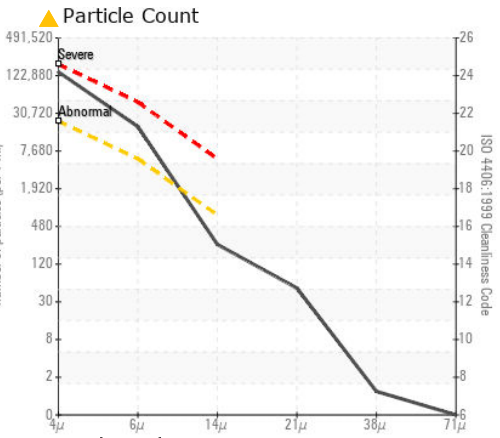
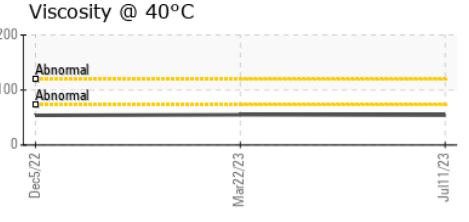
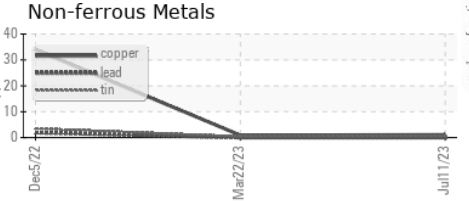
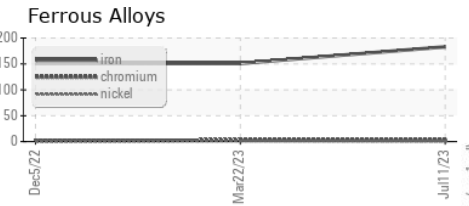


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	54.1	55.08	54.0
Visc @ 100°C	cSt	ASTM D445	10.0	10.0	9.9
Viscosity Index (VI)	Scale	ASTM D2270	174	170	172

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0828729 **Received** : 19 Jul 2023
Lab Number : 05902280 **Diagnosed** : 21 Jul 2023
Unique Number : 10563636 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

BASF - GIANNA CREDAROLI
 500 WHITE PLAINS RD
 TARRYTOWN, NY
 US 10591
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 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)