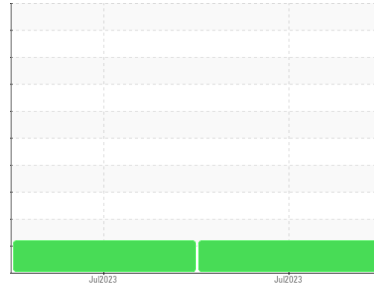




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
TSI
 Machine Id
12853
 Component
Front 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		WC0843268	WC0843267	---
Sample Date	Client Info		19 Jul 2023	19 Jul 2023	---
Machine Age	mls	Client Info	39913	39913	---
Oil Age	mls	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	126	74	---
Chromium	ppm	ASTM D5185m >10	<1	<1	---
Nickel	ppm	ASTM D5185m >10	0	0	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >25	0	0	---
Lead	ppm	ASTM D5185m >25	0	0	---
Copper	ppm	ASTM D5185m >100	<1	<1	---
Tin	ppm	ASTM D5185m >10	<1	<1	---
Vanadium	ppm	ASTM D5185m	<1	<1	---
Cadmium	ppm	ASTM D5185m	<1	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	240	246	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	5	6	---
Magnesium	ppm	ASTM D5185m	2	2	---
Calcium	ppm	ASTM D5185m	6	3	---
Phosphorus	ppm	ASTM D5185m	1504	1505	---
Zinc	ppm	ASTM D5185m	2	5	---
Sulfur	ppm	ASTM D5185m	25056	25056	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	7	9	---
Sodium	ppm	ASTM D5185m	4	4	---
Potassium	ppm	ASTM D5185m >20	3	3	---
Water	%	ASTM D6304 >.2	0.036	0.033	---
ppm Water	ppm	ASTM D6304 >2000	361.8	338.3	---

FLUID CLEANLINESS

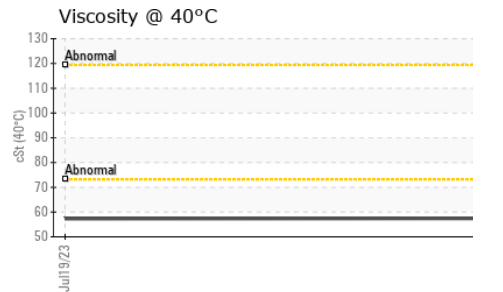
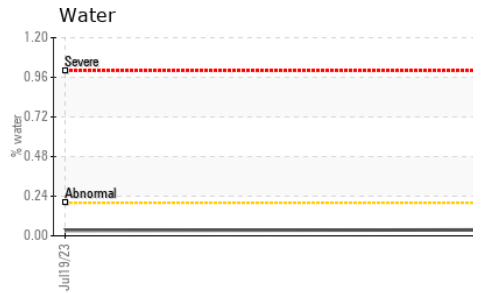
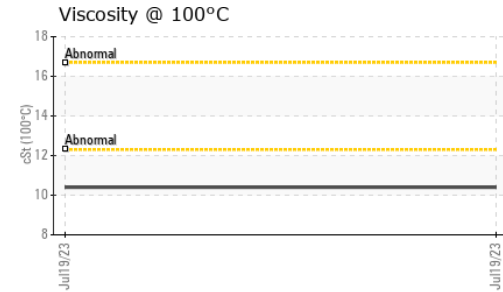
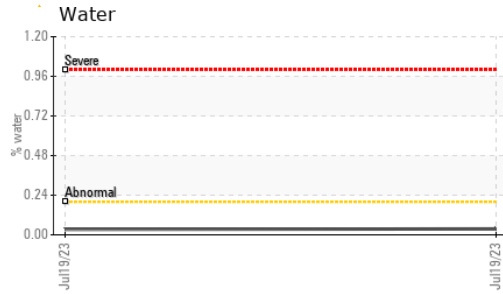
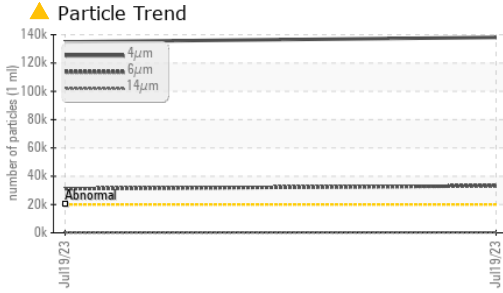
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 134947	▲ 138091	---
Particles >6µm	ASTM D7647	>5000	▲ 31148	▲ 33161	---
Particles >14µm	ASTM D7647	>640	134	327	---
Particles >21µm	ASTM D7647	>160	34	56	---
Particles >38µm	ASTM D7647	>40	2	2	---
Particles >71µm	ASTM D7647	>10	0	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/22/14	▲ 24/22/16	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.30	2.36	---



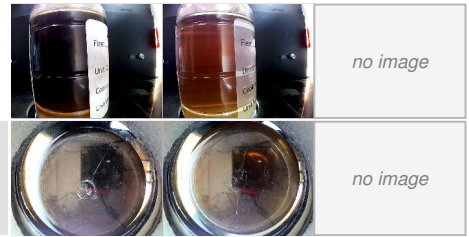
OIL ANALYSIS REPORT



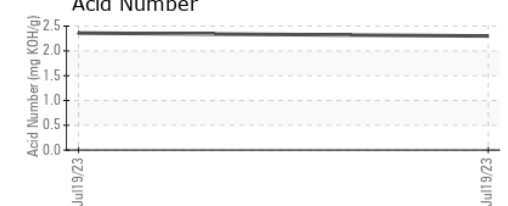
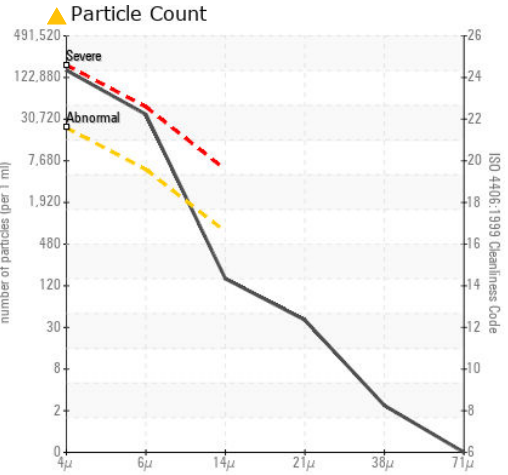
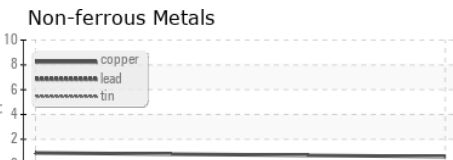
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.4	57.3	---
Visc @ 100°C	cSt	ASTM D445	10.4	10.4	---
Viscosity Index (VI)	Scale	ASTM D2270	172	172	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0843268 **Received** : 16 Aug 2023
Lab Number : 05926708 **Diagnosed** : 18 Aug 2023
Unique Number : 10606655 **Diagnostician** : 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)