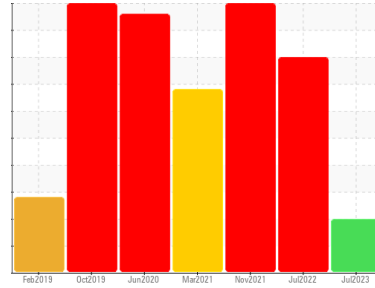




OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Area
METRO
 Machine Id
METRO 20005
 Component
Transmission (Manual)
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

Wear

The aluminum level has decreased, but is still abnormal. Moderate concentration of visible metal present.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0843168	WC0728445	WC0642314
Sample Date	Client Info		13 Jul 2023	06 Jul 2022	04 Nov 2021
Machine Age	mls	Client Info	444261	338372	270437
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	88	▲ 203	173
Chromium	ppm	ASTM D5185m >5	<1	1	2
Nickel	ppm	ASTM D5185m >5	0	<1	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >7	0	0	<1
Aluminum	ppm	ASTM D5185m >25	▲ 77	● 352	● 365
Lead	ppm	ASTM D5185m >45	0	3	1
Copper	ppm	ASTM D5185m >225	7	26	26
Tin	ppm	ASTM D5185m >10	6	▲ 28	● 27
Antimony	ppm	ASTM D5185m	---	---	<1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	236	265
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1
Manganese	ppm	ASTM D5185m	6	4	4
Magnesium	ppm	ASTM D5185m	0	0	5
Calcium	ppm	ASTM D5185m	59	47	52
Phosphorus	ppm	ASTM D5185m	829	1104	1095
Zinc	ppm	ASTM D5185m	7	12	22
Sulfur	ppm	ASTM D5185m	14541	1357	1233

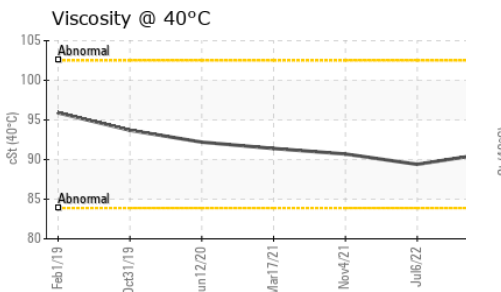
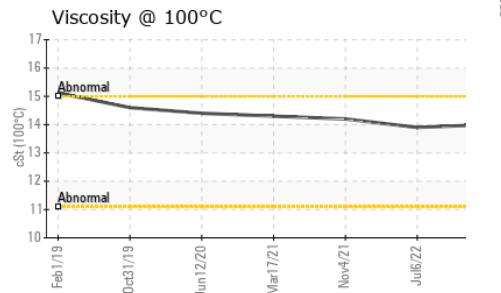
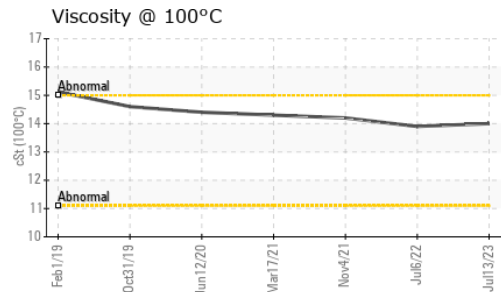
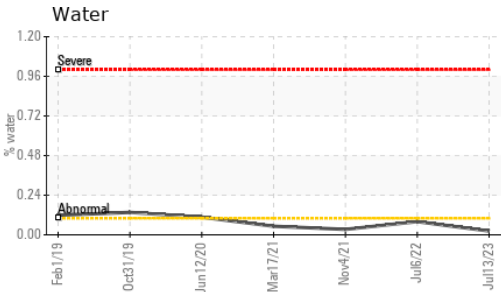
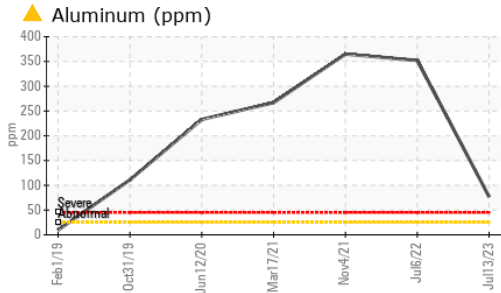
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >125	20	28	27
Sodium	ppm	ASTM D5185m	4	3	3
Potassium	ppm	ASTM D5185m >20	12	6	8
Water	%	ASTM D6304 >0.1	0.023	0.080	0.033
ppm Water	ppm	ASTM D6304 >1000	236.6	803.0	339.6

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.53	2.79	3.483

OIL ANALYSIS REPORT



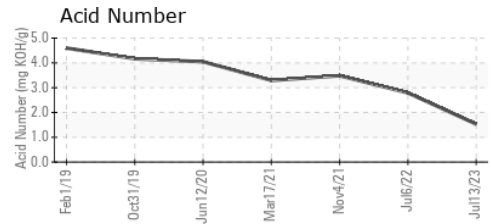
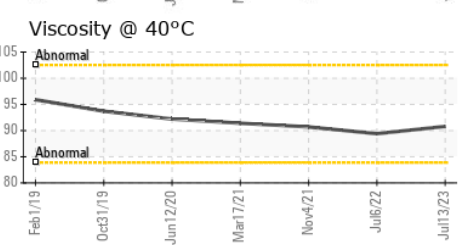
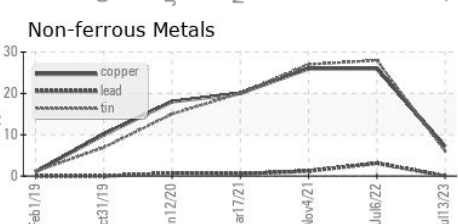
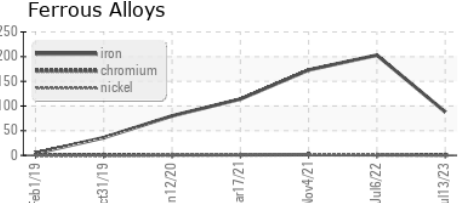
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	90.8	89.4	90.7
Visc @ 100°C	cSt	ASTM D445	14.0	13.9	14.2
Viscosity Index (VI)	Scale	ASTM D2270	158	159	161

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0843168 **Received** : 22 Aug 2023
Lab Number : 05931520 **Diagnosed** : 24 Aug 2023
Unique Number : 10616791 **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)