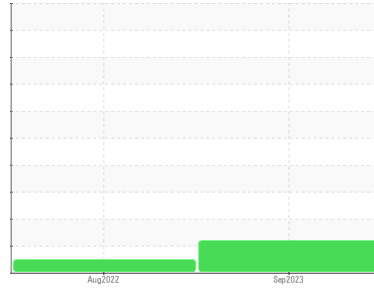




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
MET EXPRESS
 Machine Id
MET EXPRESS 23016
 Component
Transmission (Manual)
 Fluid
SAE 80 (--- 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 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	WC0853942	WC0728384	---
Sample Date	Client Info	22 Sep 2023	09 Aug 2022	---
Machine Age	mls	Client Info	120169	3480
Oil Age	mls	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	---
Sample Status		ABNORMAL	NORMAL	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	35	4
Chromium	ppm	ASTM D5185m >5	0	<1
Nickel	ppm	ASTM D5185m >5	<1	0
Titanium	ppm	ASTM D5185m	0	0
Silver	ppm	ASTM D5185m >7	0	<1
Aluminum	ppm	ASTM D5185m >25	6	2
Lead	ppm	ASTM D5185m >45	<1	<1
Copper	ppm	ASTM D5185m >225	20	<1
Tin	ppm	ASTM D5185m >10	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	15	49
Barium	ppm	ASTM D5185m	<1	0
Molybdenum	ppm	ASTM D5185m	339	379
Manganese	ppm	ASTM D5185m	2	<1
Magnesium	ppm	ASTM D5185m	<1	0
Calcium	ppm	ASTM D5185m	365	501
Phosphorus	ppm	ASTM D5185m	785	972
Zinc	ppm	ASTM D5185m	9	0
Sulfur	ppm	ASTM D5185m	10567	12893

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >125	24	7
Sodium	ppm	ASTM D5185m	2	0
Potassium	ppm	ASTM D5185m >20	6	0
Water	%	ASTM D6304 >0.1	0.017	0.005
ppm Water	ppm	ASTM D6304 >1000	172.0	57.4

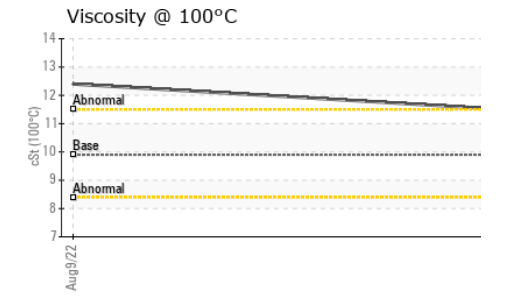
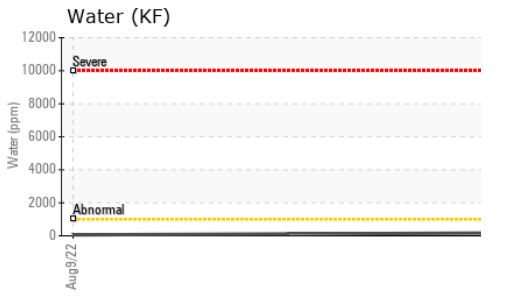
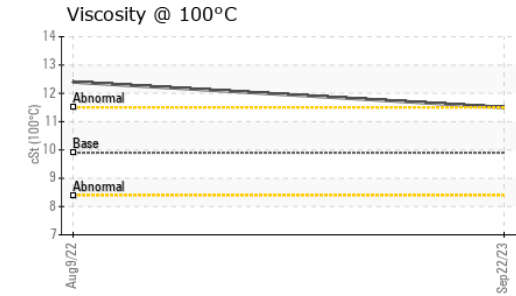
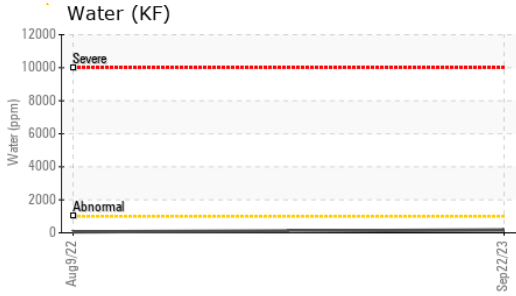
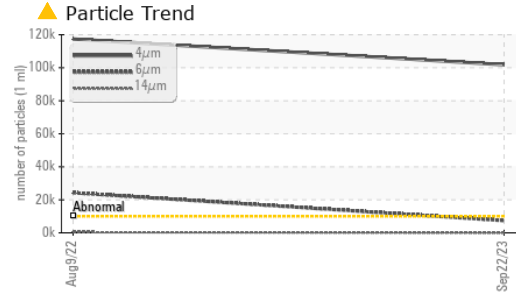
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 101810	117370	---
Particles >6µm	ASTM D7647 >2500	▲ 7386	24270	---
Particles >14µm	ASTM D7647 >320	64	368	---
Particles >21µm	ASTM D7647 >80	15	52	---
Particles >38µm	ASTM D7647 >20	1	0	---
Particles >71µm	ASTM D7647 >4	0	0	---
Oil Cleanliness	ISO 4406 (c) >20/18/15	▲ 24/20/13	24/22/16	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.04	1.67

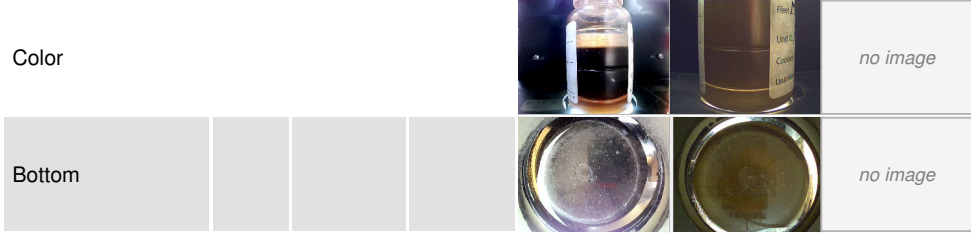
OIL ANALYSIS REPORT



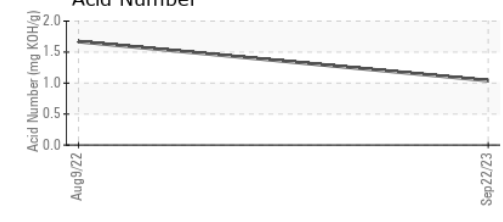
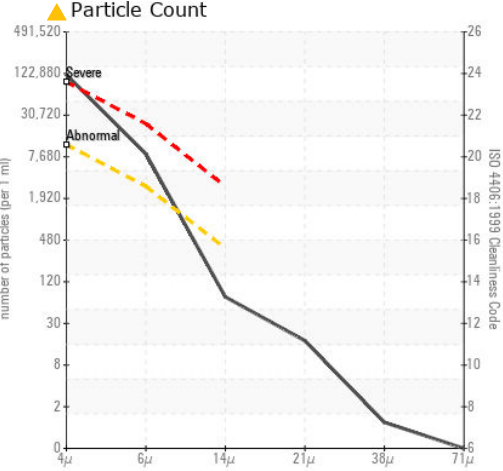
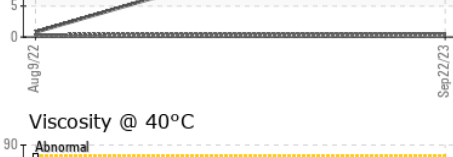
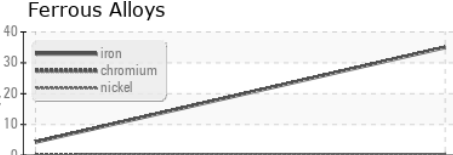
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	VLITE	---
Sand/Dirt	scalar	*Visual	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	77.9	71.7	76.3	---
Visc @ 100°C	cSt	ASTM D445	9.9	11.5	12.4	---
Viscosity Index (VI)	Scale	ASTM D2270	106	154	161	---

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0853942 **Received** : 01 Nov 2023
Lab Number : 05996284 **Diagnosed** : 03 Nov 2023
Unique Number : 10724644 **Diagnostician** : Don Baldrige
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)