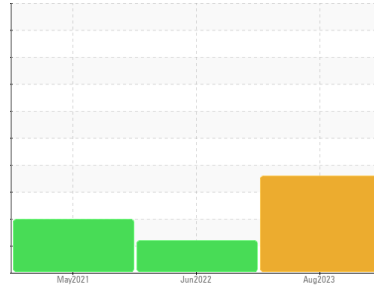




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
3196 - PLOGER
 Component
Transmission (Manual)
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

- Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
Bearing and/or gear wear is indicated.
- 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		WC0853870	WC0692994	WC0604652
Sample Date	Client Info		02 Aug 2023	10 Jun 2022	28 May 2021
Machine Age	mls	Client Info	417877	342640	232937
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 >200	▲ 232	27	▲ 204
Chromium	ppm	ASTM D5185m >5	4	<1	3
Nickel	ppm	ASTM D5185m >5	<1	1	<1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >7	0	<1	0
Aluminum	ppm	ASTM D5185m >25	▲ 26	<1	17
Lead	ppm	ASTM D5185m >45	<1	0	<1
Copper	ppm	ASTM D5185m >225	▲ 151	<1	92
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	145	13	230
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	3	0	2
Manganese	ppm	ASTM D5185m	24	<1	22
Magnesium	ppm	ASTM D5185m	2	30	6
Calcium	ppm	ASTM D5185m	172	0	197
Phosphorus	ppm	ASTM D5185m	1172	194	1195
Zinc	ppm	ASTM D5185m	48	0	12
Sulfur	ppm	ASTM D5185m	943	3850	772

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >125	11	3	16
Sodium	ppm	ASTM D5185m	3	11	4
Potassium	ppm	ASTM D5185m >20	2	24	2
Water	%	ASTM D6304 >0.1	0.081	0.065	0.078
ppm Water	ppm	ASTM D6304 >1000	818.7	656.9	784.2

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 67547	---	---
Particles >6µm	ASTM D7647	>2500	▲ 3333	---	---
Particles >14µm	ASTM D7647	>320	20	---	---
Particles >21µm	ASTM D7647	>80	2	---	---
Particles >38µm	ASTM D7647	>20	0	---	---
Particles >71µm	ASTM D7647	>4	0	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 23/19/11	---	---

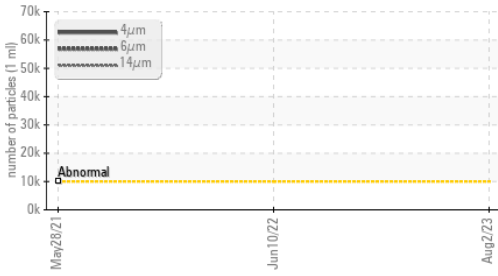
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.41	▲ 3.59	▲ 3.677

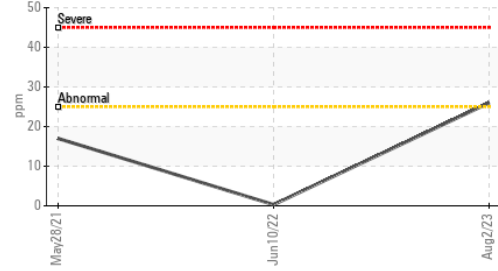


OIL ANALYSIS REPORT

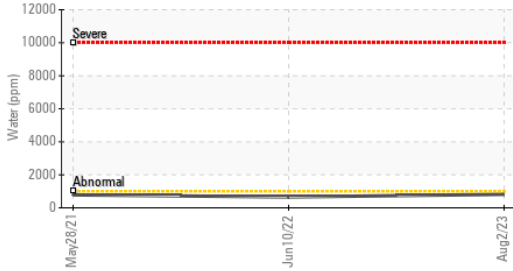
▲ Particle Trend



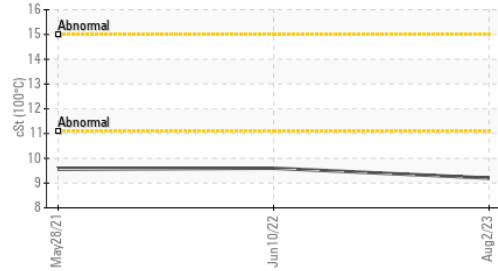
▲ Aluminum (ppm)



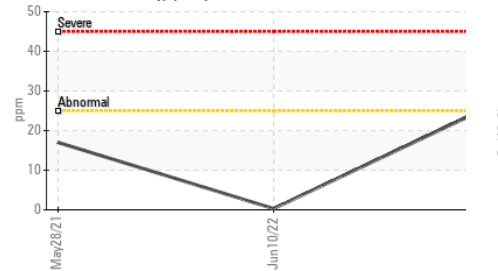
▲ Water (KF)



▲ Viscosity @ 100°C



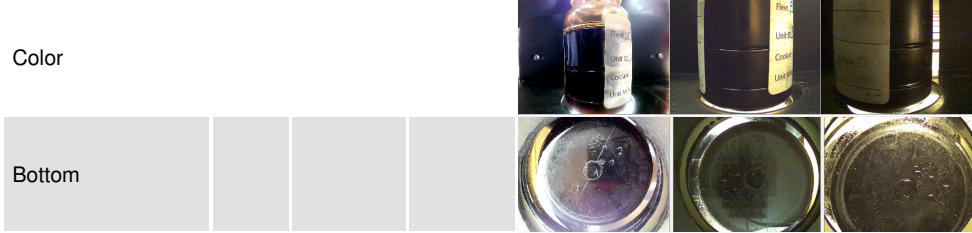
▲ Aluminum (ppm)



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	LIGHT	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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

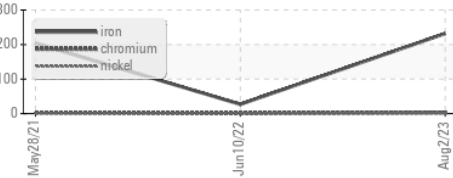
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	53.9	54.2	53.86
Visc @ 100°C	cSt	ASTM D445	9.2	9.6	9.56
Viscosity Index (VI)	Scale	ASTM D2270	152	163	163

SAMPLE IMAGES

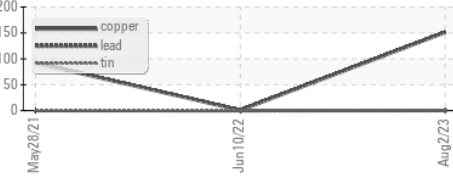


GRAPHS

▲ Ferrous Alloys



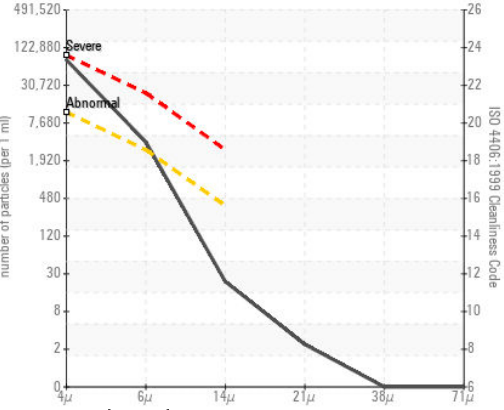
▲ Non-ferrous Metals



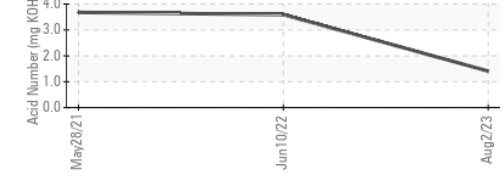
▲ Viscosity @ 40°C



▲ Particle Count



▲ Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0853870 **Received** : 22 Sep 2023
Lab Number : 05959071 **Diagnosed** : 26 Sep 2023
Unique Number : 10660284 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

BASF - GIANNA CREDAROLI
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 TARRYTOWN, NY
 US 10591
 Contact: GIANNA CREDAROLI
 gianna.credaroli@basf.com

Certificate L2367
 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)