



OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL

Area
VENEZIA
 Machine Id
VENEZIA 2270
 Component
Front Differential
 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

Moderate concentration of visible metal present. All component wear rates are normal.

Contamination

There is no indication of any contamination 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		WC0876020	WC0751699	---
Sample Date	Client Info		29 Nov 2023	26 Sep 2022	---
Machine Age	mls	Client Info	99516	117	---
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	231	11	---
Chromium	ppm	ASTM D5185m	>10	3	0	---
Nickel	ppm	ASTM D5185m	>10	4	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	4	<1	---
Lead	ppm	ASTM D5185m	>25	2	0	---
Copper	ppm	ASTM D5185m	>100	26	<1	---
Tin	ppm	ASTM D5185m	>10	3	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		101	106	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		13	1	---
Magnesium	ppm	ASTM D5185m		154	163	---
Calcium	ppm	ASTM D5185m		4	2	---
Phosphorus	ppm	ASTM D5185m		1698	1589	---
Zinc	ppm	ASTM D5185m		0	<1	---
Sulfur	ppm	ASTM D5185m		25054	27559	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>75	38	4	---
Sodium	ppm	ASTM D5185m		4	1	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Water	%	ASTM D6304	>.2	0.013	0.042	---
ppm Water	ppm	ASTM D6304	>2000	139	424.3	---

FLUID CLEANLINESS

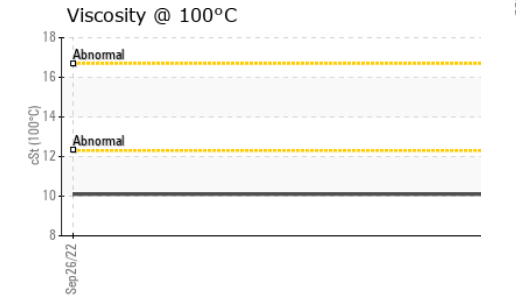
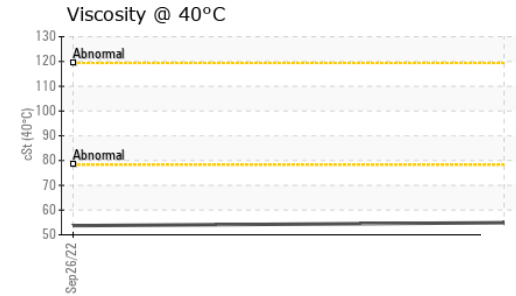
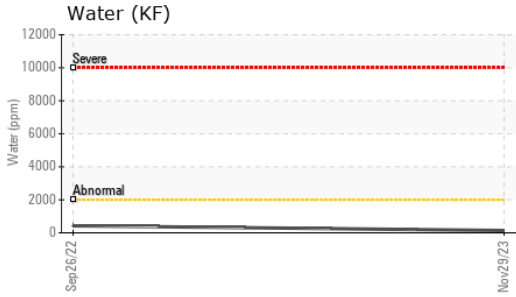
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	---	▲ 114485	---
Particles >6µm	ASTM D7647	>5000	---	▲ 23318	---
Particles >14µm	ASTM D7647	>640	---	609	---
Particles >21µm	ASTM D7647	>160	---	90	---
Particles >38µm	ASTM D7647	>40	---	5	---
Particles >71µm	ASTM D7647	>10	---	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	---	▲ 24/22/16	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		0.73	0.72	---



OIL ANALYSIS REPORT




VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	54.9	53.7	---
Visc @ 100°C	cSt	ASTM D445	10.1	10.1	---
Viscosity Index (VI)	Scale	ASTM D2270	173	178	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				
Bottom				

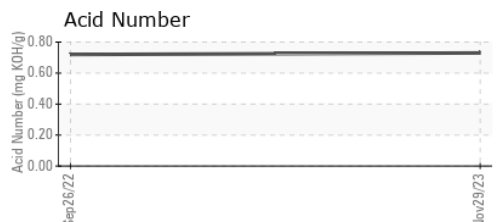
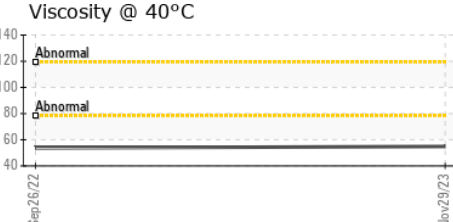
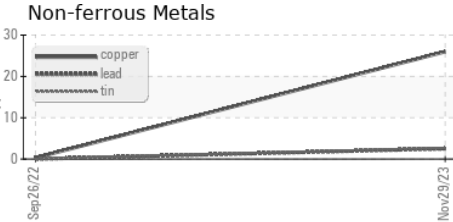
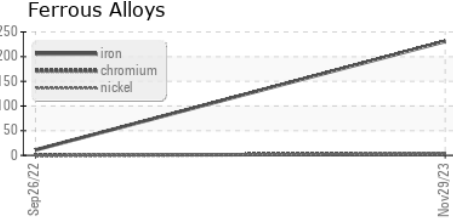


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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0876020 **Received** : 05 Dec 2023
Lab Number : 06025721 **Diagnosed** : 07 Dec 2023
Unique Number : 10770221 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

BASF - GIANNA CREDAROLI
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 US 10591
 Contact: GIANNA CREDAROLI
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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)

T:
F: