



OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
HOMO 2

Component
Gearbox

Fluid
GEAR OIL FG ISO 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0012862	---	---
Sample Date	Client Info		28 May 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ATTENTION	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	7	---	---
Chromium	ppm	ASTM D5185m >15	0	---	---
Nickel	ppm	ASTM D5185m >15	0	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m	<1	---	---
Aluminum	ppm	ASTM D5185m >25	<1	---	---
Lead	ppm	ASTM D5185m >100	<1	---	---
Copper	ppm	ASTM D5185m >200	<1	---	---
Tin	ppm	ASTM D5185m >25	<1	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	0	---	---
Barium	ppm	ASTM D5185m 5	<1	---	---
Molybdenum	ppm	ASTM D5185m 5	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 5	<1	---	---
Calcium	ppm	ASTM D5185m 12	0	---	---
Phosphorus	ppm	ASTM D5185m 400	568	---	---
Zinc	ppm	ASTM D5185m 12	0	---	---
Sulfur	ppm	ASTM D5185m 750	678	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	1	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---
Water	%	ASTM D6304 >0.2	0.119	---	---
ppm Water	ppm	ASTM D6304 >2000	1190	---	---

FLUID CLEANLINESS

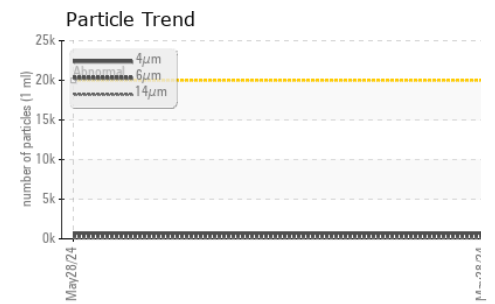
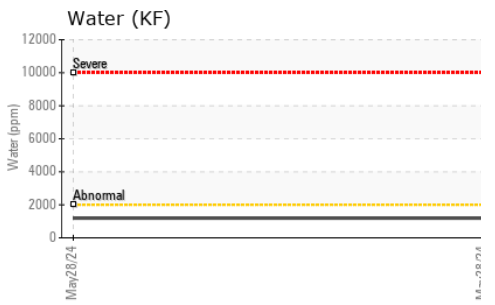
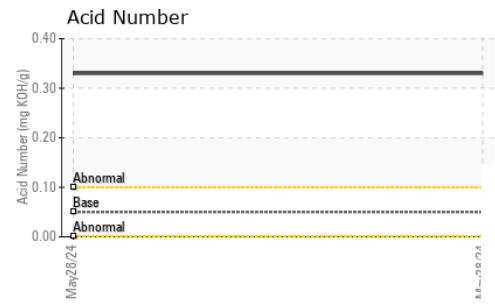
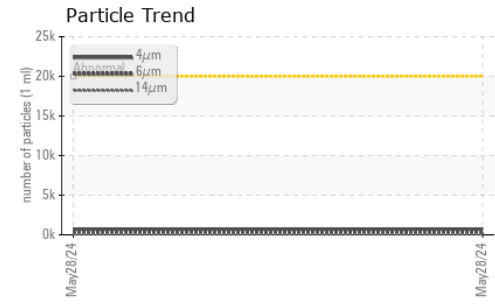
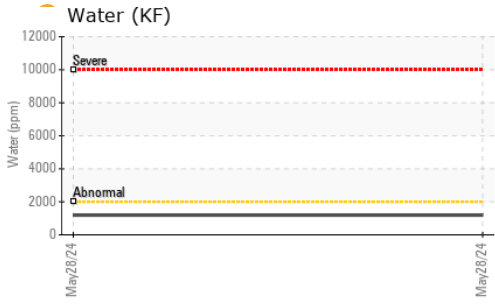
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	722	---	---
Particles >6µm	ASTM D7647	>5000	393	---	---
Particles >14µm	ASTM D7647	>640	67	---	---
Particles >21µm	ASTM D7647	>160	23	---	---
Particles >38µm	ASTM D7647	>40	3	---	---
Particles >71µm	ASTM D7647	>10	0	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	17/16/13	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	0.33	---	---



OIL ANALYSIS REPORT



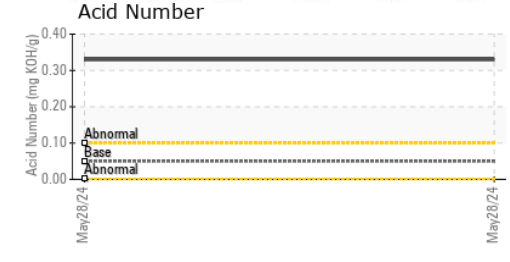
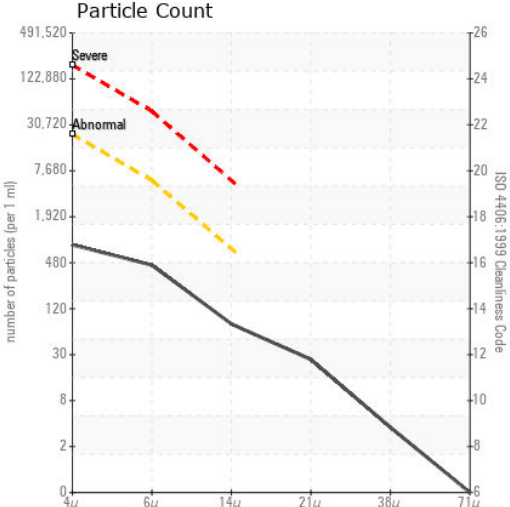
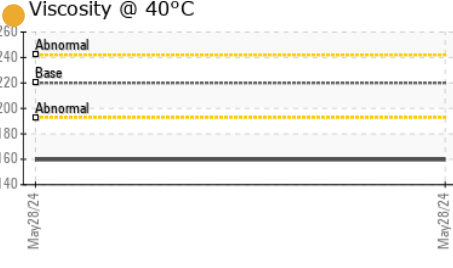
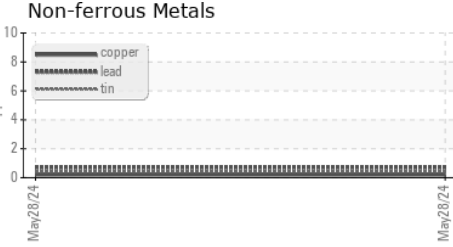
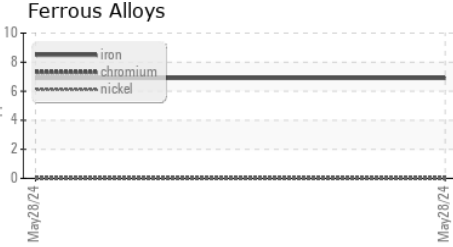
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	HAZY	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	0.2%	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	159.7	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012862 **Received** : 29 May 2024
Lab Number : 06193997 **Tested** : 12 Jun 2024
Unique Number : 11056120 **Diagnosed** : 12 Jun 2024 - Doug Bogart
Test Package : IND 2

CARGILL
 3100 BONAZA RD
 LAKE ODESSA, MI
 US 48849
 Contact: Service Manager

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)