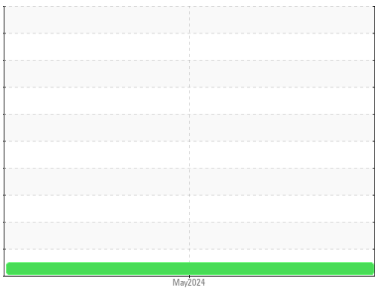
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
FG 220
Component
New (Unused) Oil
Fluid
{not provided} (--- QTS)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP0012860**	---	---
Sample Date		Client Info		**29 May 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**NORMAL**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	**0**	---	---
Chromium	ppm	ASTM D5185m	>5	**0**	---	---
Nickel	ppm	ASTM D5185m	>5	**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m	>5	**0**	---	---
Aluminum	ppm	ASTM D5185m	>5	**0**	---	---
Lead	ppm	ASTM D5185m	>5	**0**	---	---
Copper	ppm	ASTM D5185m	>5	**0**	---	---
Tin	ppm	ASTM D5185m	>5	**<1**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

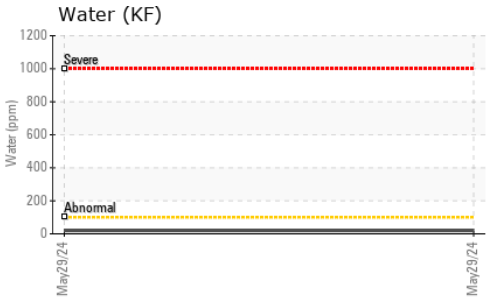
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**0**	---	---
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m		**<1**	---	---
Calcium	ppm	ASTM D5185m		**3**	---	---
Phosphorus	ppm	ASTM D5185m		**691**	---	---
Zinc	ppm	ASTM D5185m		**0**	---	---
Sulfur	ppm	ASTM D5185m		**708**	---	---

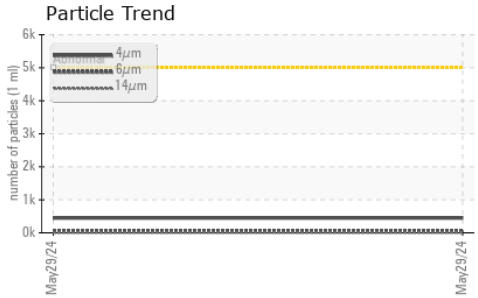
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	---	---
Sodium	ppm	ASTM D5185m		**<1**	---	---
Potassium	ppm	ASTM D5185m	>20	**<1**	---	---
Water	%	ASTM D6304		**0.002**	---	---
ppm Water	ppm	ASTM D6304		**20**	---	---

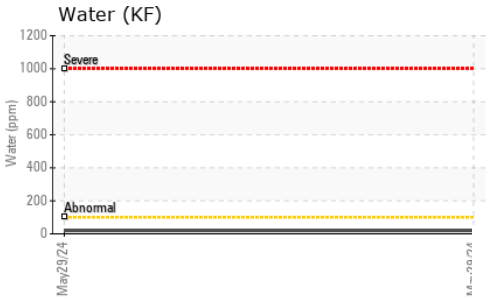
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**447**	---	---
Particles >6µm		ASTM D7647	>1300	**53**	---	---
Particles >14µm		ASTM D7647	>160	**5**	---	---
Particles >21µm		ASTM D7647	>40	**1**	---	---
Particles >38µm		ASTM D7647	>10	**0**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**16/13/10**	---	---

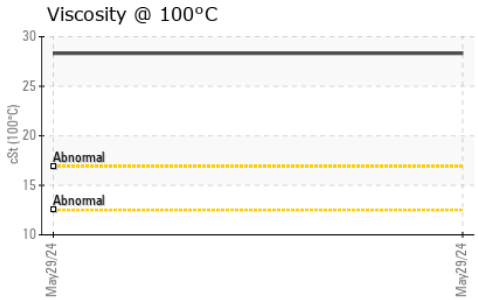
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.80**	---	---

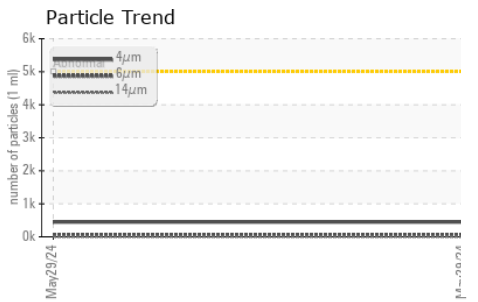
OIL ANALYSIS REPORT









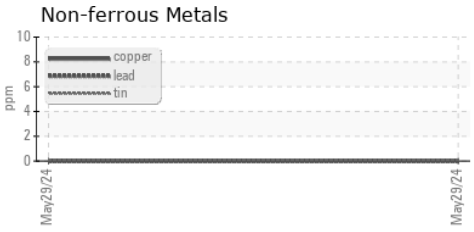


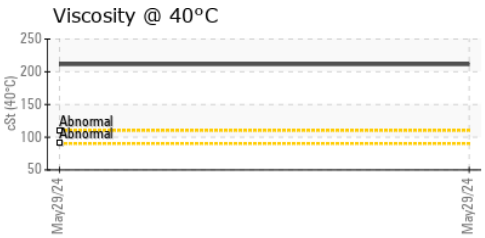
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**LIGHT**	---	---
Sand/Dirt	scalar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

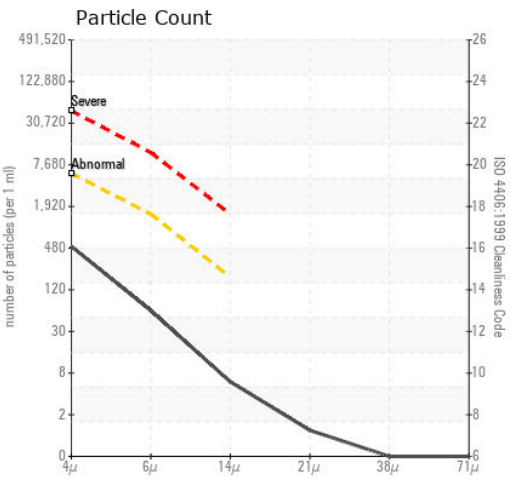
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**211.4**	---	---
Visc @ 100°C	cSt	ASTM D445		**28.32**	---	---
Viscosity Index (VI)	Scale	ASTM D2270		**172**	---	---

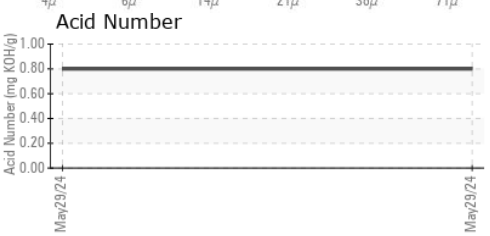
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS









Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012860 **Received** : 29 May 2024
Lab Number : 06194523 **Tested** : 04 Jun 2024
Unique Number : 11056646 **Diagnosed** : 04 Jun 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: FT-IR, KV100, VI)

Certificate L2367

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)

T:
F: