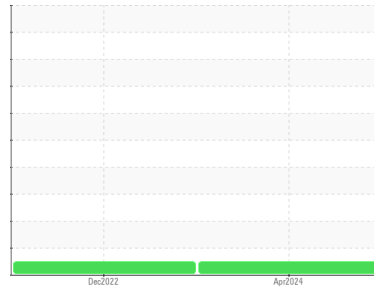




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

Wayne State University

Machine Id

**CARRIER Purdy Library CH4 (S/N 71620)**

Component

Centrifugal Compressor

Fluid

POE 68 (10 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 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		<b>WC0827318</b>	WC0507804	---
Sample Date	Client Info		<b>25 Apr 2024</b>	16 Dec 2022	---
Machine Age	hrs	Client Info	<b>0</b>	43494	---
Oil Age	hrs	Client Info	<b>0</b>	43494	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m >25	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>1</b>	3	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Calcium	ppm	ASTM D5185m	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	<b>1028</b>	1196	---
Zinc	ppm	ASTM D5185m	<b>14</b>	<1	---
Sulfur	ppm	ASTM D5185m	<b>0</b>	0	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	6	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	---
Water	%	ASTM D6304 >0.1	<b>0.009</b>	0.003	---
ppm Water	ppm	ASTM D6304 >1000	<b>95</b>	39.5	---

## FLUID CLEANLINESS

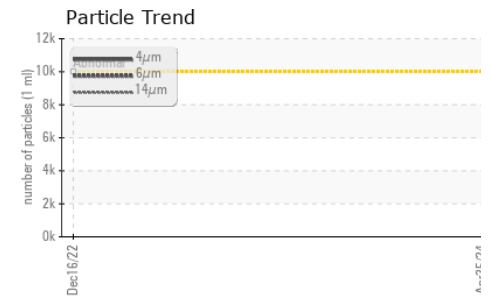
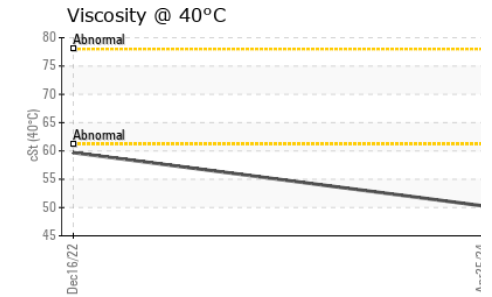
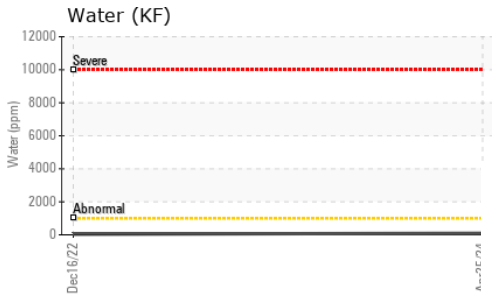
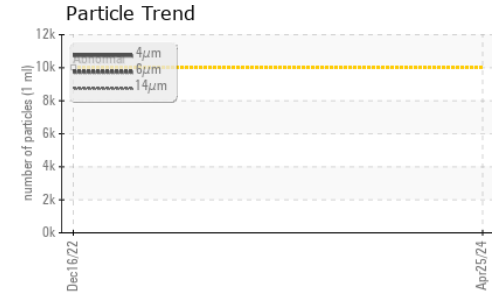
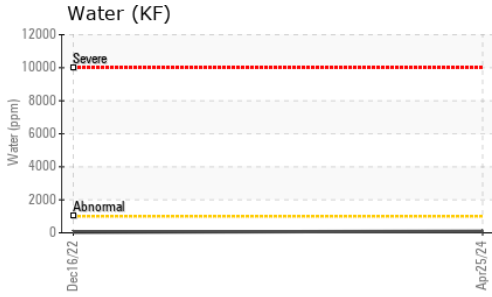
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>1258</b>	---	---
Particles >6µm	ASTM D7647	>2500	<b>99</b>	---	---
Particles >14µm	ASTM D7647	>320	<b>9</b>	---	---
Particles >21µm	ASTM D7647	>80	<b>2</b>	---	---
Particles >38µm	ASTM D7647	>20	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>17/14/10</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.027</b>	0.014	---



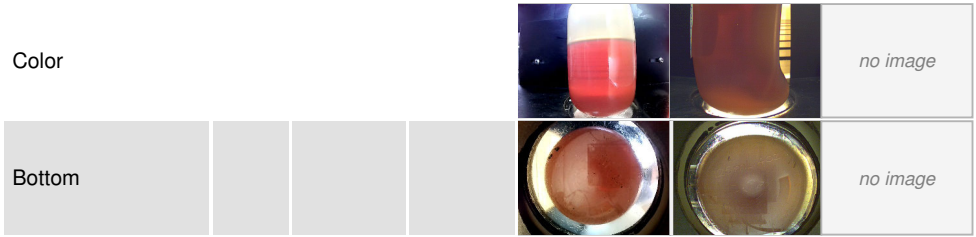
# OIL ANALYSIS REPORT



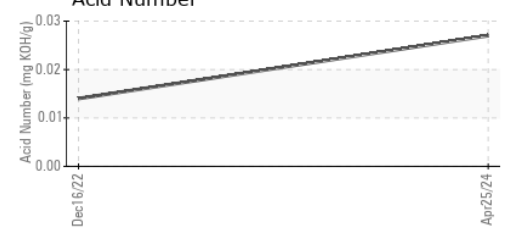
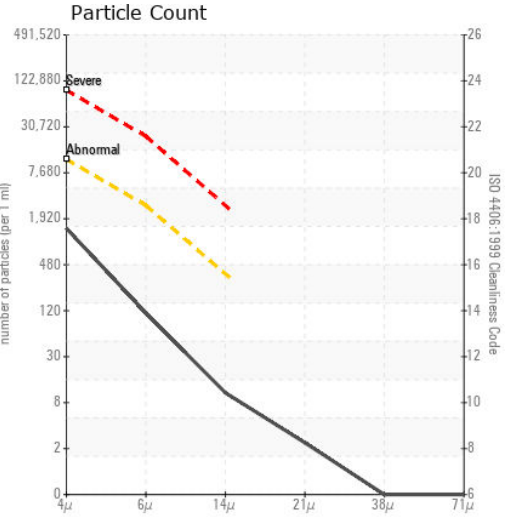
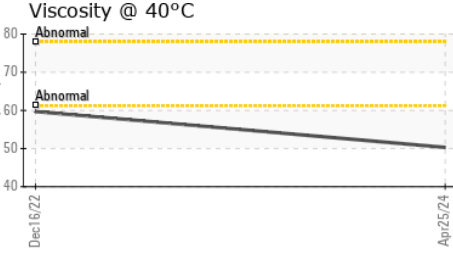
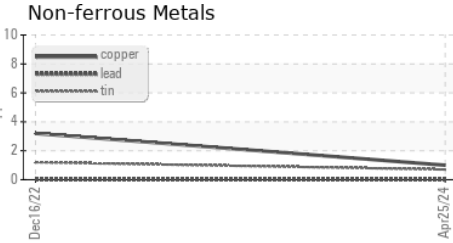
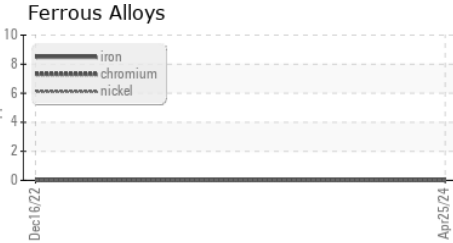
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	50.3	59.7	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0827318

Lab Number : 06175572

Unique Number : 11021625

Test Package : PLANT

Received : 10 May 2024

Tested : 13 May 2024

Diagnosed : 13 May 2024 - Doug Bogart

**THERMALNETICS, INC**

3955 PINNACLE COURT SUITE 200

AUBURN HILLS, MI

US 48326

Contact: GARY WATSON

garyw@thermalnetics.com

T: (248)276-3351

F:

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)