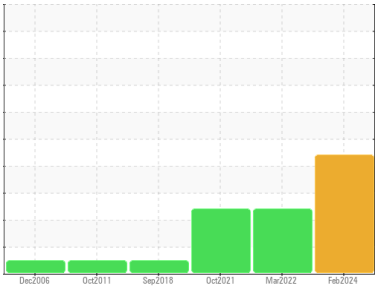
OIL ANALYSIS REPORT

Area
[816844]
Machine Id
YORK GHGM176660
Component
Chiller
Fluid
YORK TYPE C (--- GAL)

Sample Rating Trend



WATER

DIAGNOSIS

Recommendation

The acid number (AN) indicates that your fluid has reached the end of its useful life, please proceed with a complete oil change. We recommend an early resample to monitor this condition. Recommend check for proper purging due to the elevated moisture content.

Wear

Iron ppm levels are abnormal. Oil pump wear is indicated. Copper ppm levels are noted. The elevated copper reading suggests the effects of oil migration through the evaporator (oil loss from the compressor) possibly occurring during intervals of operation at low cooling load conditions.

Contamination

There is a trace of moisture present in the oil.

Fluid Condition

The AN level is above the recommended limit. The oil is no longer serviceable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GTT0002115**	GTT30482	GTT30483
Sample Date		Client Info		**23 Feb 2024**	24 Mar 2022	01 Oct 2021
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**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 D5185(m)	>8	▲ **6**	2	2
Chromium	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Nickel	ppm	ASTM D5185(m)		**<1**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)	>2	**0**	---	---
Aluminum	ppm	ASTM D5185(m)	>3	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>8	● **12**	▲ 16	▲ 13
Tin	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Antimony	ppm	ASTM D5185(m)		**0**	---	---
Vanadium	ppm	ASTM D5185(m)		**0**	---	---
Beryllium	ppm	ASTM D5185(m)		**0**	---	---
Cadmium	ppm	ASTM D5185(m)		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**0**	---	---
Barium	ppm	ASTM D5185(m)	0	**0**	---	---
Molybdenum	ppm	ASTM D5185(m)	0	**0**	---	---
Manganese	ppm	ASTM D5185(m)	0	**0**	---	---
Magnesium	ppm	ASTM D5185(m)	0	**<1**	---	---
Calcium	ppm	ASTM D5185(m)	0	**0**	---	---
Phosphorus	ppm	ASTM D5185(m)	0	**2**	---	---
Zinc	ppm	ASTM D5185(m)	0	**2**	<1	<1
Sulfur	ppm	ASTM D5185(m)	200	**272**	---	---
Lithium	ppm	ASTM D5185(m)		**1**	---	---

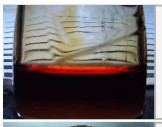
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**2**	---	---
Sodium	ppm	ASTM D5185(m)		**0**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**2**	---	---
ppm Water	ppm	ASTM D6304*	>50	▲ **62**	▲ 82	▲ 73

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.11	▲ **0.14**	0.042	0.022

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**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	63.8	**44.9**	---	---

SAMPLE IMAGES				current	history1	history2
Color					*no image*	*no image*
Bottom					*no image*	*no image*

GRAPHS

Sample No. : GTT0002115
Lab Number : 02621023
Unique Number : 5746142
Test Package : IND 2 (Additional Tests: KV40)

Received : 08 Mar 2024
Tested : 11 Mar 2024
Diagnosed : 11 Mar 2024 - Bill Quesnel

To discuss this sample report, contact Customer Service at 1-905-847-9300 Ext 26.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Damages: Seller shall in no event be liable for special, incidental, or consequential damages, of a commercial nature, resulting from any cause.

Ainsworth
1510 Old Falconbridge Road
Sudbury, ON
CA P3A 4N8
Contact: Service Manager
invoices@ainsworth.com
T: (705)971-4097
F: