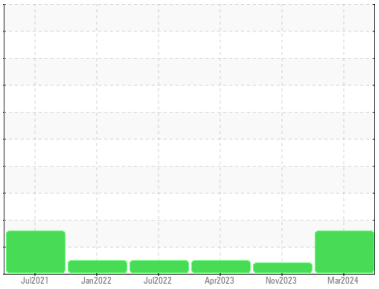
OIL ANALYSIS REPORT

Area
CIBC 81 Bay St Ch#3 [GTT224-342]
Machine Id
YORK SMFM244500
Component
Chiller
Fluid
YORK TYPE K (--- GAL)

Sample Rating Trend



WATER

DIAGNOSIS

Recommendation
If not recently done change any filter driers to reduce moisture level. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
The elevated moisture content is associated with POE oils which are hygroscopic, and can absorb moisture from sampling and processing.

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		**GTT0000677**	GTT0000824	GTT68425
Sample Date		Client Info		**15 Mar 2024**	07 Nov 2023	03 Apr 2023
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>8	**1**	2	<1
Chromium	ppm	ASTM D5185(m)	>2	**0**	0	<1
Nickel	ppm	ASTM D5185(m)		**0**	<1	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	---
Aluminum	ppm	ASTM D5185(m)	>3	**0**	0	<1
Lead	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Copper	ppm	ASTM D5185(m)	>8	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>4	**0**	0	<1
Antimony	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**<1**	<1	---
Barium	ppm	ASTM D5185(m)	0	**<1**	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	---
Manganese	ppm	ASTM D5185(m)	0	**0**	0	---
Magnesium	ppm	ASTM D5185(m)	0	**0**	0	---
Calcium	ppm	ASTM D5185(m)	0	**0**	<1	---
Phosphorus	ppm	ASTM D5185(m)	5	**<1**	0	---
Zinc	ppm	ASTM D5185(m)	0	**1**	<1	<1
Sulfur	ppm	ASTM D5185(m)	10	**14**	11	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**<1**	3	---
Sodium	ppm	ASTM D5185(m)		**<1**	2	---
Potassium	ppm	ASTM D5185(m)	>20	**1**	1	---
ppm Water	ppm	ASTM D6304*	>300	**344**	299	222

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.03	**0.02**	0.06	0.016

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32.0	**34.8**	▲ 1.9	---

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

GRAPHS

Sample No. : GTT0000677
Lab Number : 02625898
Unique Number : 5759030
Test Package : IND 2 (Additional Tests: KV40)

Received : 01 Apr 2024
Tested : 04 Apr 2024
Diagnosed : 04 Apr 2024 - Bill Quesnel

Johnson Controls - Markham
Accounts Payable A-33, P.O. Box 2012
Milwaukee, WI
US 532012012
Contact: Service Manager

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.

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F: