

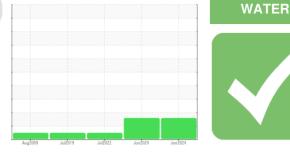
# **OIL ANALYSIS REPORT**

Sample Rating Trend



# UQTR Ch#2 [GTT224-474 1-1335035] YORK RHPM012391(2) Component Chiller

SAMPLE INFORMATION method





Fluid YORK TYPE L (--- GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

## 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.

		method	iiiiii/base	current	nistory i	TIIStOryz
Sample Number		Client Info		GTT0001149	GTT0001151	GTT59799
Sample Date		Client Info		21 Jun 2024	21 Jun 2024	27 Jul 2022
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	ATTENTION	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>8	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>2	0	0	<1
Nickel	ppm	ASTM D5185(m)		<1	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>2	0	0	
Aluminum	ppm	ASTM D5185(m)	>3	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>2	0	0	<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
ADDITIVES Boron	ppm		limit/base	-	history1 <1	history2
	ppm ppm	method		current	· · · · · ·	
Boron		method ASTM D5185(m)	0	current	<1	
Boron Barium	ppm	method ASTM D5185(m) ASTM D5185(m)	0 0 0	current <1 0	<1 0	
Boron Barium Molybdenum	ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	current <1 0 0	<1 0 0	
Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0	Current <1 0 0 0 0 0 0	<1 0 0 0 0 0 0	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0	Current <1 0 0 0 0 0 0 2	<1 0 0 0 0 0 1	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0	Current <1 0 0 0 0 0 0	<1 0 0 0 0 0 0	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0	Current <1 0 0 0 0 0 0 2	<1 0 0 0 0 0 1	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method           ASTM D5185(m)	0 0 0 0 0 0 0 0	Current <1 0 0 0 0 0 0 2 2 2	<1 0 0 0 0 0 1 2	    <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185(m)	0 0 0 0 0 0 0 0	Current <1 0 0 0 0 0 0 2 2 2 13	<1 0 0 0 0 0 1 2 16	   <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185(m)	0 0 0 0 0 0 0 0 0 0 10	Current <1 0 0 0 0 0 2 2 13 <1	<1 0 0 0 0 1 2 16 <1	    <1 
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185(m)	0 0 0 0 0 0 0 0 0 10 10 10 10	Current <1 0 0 0 0 0 2 2 13 <1 Current	<1 0 0 0 0 1 2 16 <1 history1	    <1   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185(m)	0 0 0 0 0 0 0 0 0 10 10 10 10	current           <1           0           0           0           0           0           2           13           <1           current           2	<1 0 0 0 0 1 2 16 <1 history1 2	    <1   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185(m)	0 0 0 0 0 0 0 0 0 0 10 10 10 2 15	current         <1         0         0         0         0         0         2         13         <1         current         2         0         0	<1 0 0 0 0 1 2 16 <1 history1 2 0	    <1   history2 
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185(m)           ASTM D5185(m)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	current         <1         0         0         0         0         0         0         0         0         0         2         13         <1         current         2         0         0         0         0         0         0         0         0         0	<1 0 0 0 0 1 2 16 <1 <b>history1</b> 2 0 <1	   <1  <1  +istory2



# **OIL ANALYSIS REPORT**

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 PROPERT	IES	method	limit/base	current	history1	history2			
Visc @ 40°C	cSt	ASTM D7279(m)	120	101	85.8				
SAMPLE IMAGES		method	limit/base	current	history1	history2			
Color						no image			
Bottom						no image			
GRAPHS									



Sample No. : GTT0001149 Received : 02 Jul 2024 Société de Contrôles Johnson Canada, 765 Ave Godin Lab Number : 02645093 Tested : 11 Jul 2024 Québec, QC : 11 Jul 2024 - Bill Quesnel Unique Number : 5802632 Diagnosed CA G1M 2W8 Test Package : IND 2 ( Additional Tests: KF, TAN Man ) 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.

Report Id: GTT0000202 [WCAMIS] 02645093 (Generated: 07/11/2024 13:06:19) Rev: 3

Contact/Location: Service Manager - GTT0000202 Page 2 of 2

Johnson Controls- Quebec

T:

F: