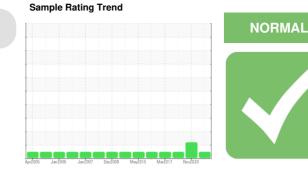


# **OIL ANALYSIS REPORT**

Area **GM Oshawa CUC Plant 1B [GTT224-483 1-1PBPR8V] TRANE LO3B02779** Component Chiller



Fluid TRANE 0022 (--- GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The water content is negligible. There is no indication of any contamination in the oil.

## Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GTT0002950	GTT33627	GTT33629
Sample Date		Client Info		03 Jul 2024	30 Nov 2020	14 May 2018
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>8	<1	<b>1</b> 0	<1
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	0	<1	<1
Copper	ppm	ASTM D5185(m)	>8	4	1	<1
Tin	ppm	ASTM D5185(m)	>4	0	<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	<1		
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	0		
Calcium	ppm	ASTM D5185(m)	0	0		
Phosphorus	ppm	ASTM D5185(m)	35	2		
Zinc	ppm	ASTM D5185(m)	0	1	<b>A</b> 33	6
Sulfur	ppm	ASTM D5185(m)	30	11		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	16		
Sodium	ppm	ASTM D5185(m)		0		
Potassium	ppm	ASTM D5185(m)	>20	<1		
ppm Water	ppm	ASTM D6304*	>50	2	34	11
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.05	0.01	0.401	0.016



# **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)	47	41.7				
SAMPLE IMAGES		method	limit/base	current	history1	history2		
Color					no image	no image		
Bottom				6	no image	no image		
GRAPHS								



Lab Number : 02647471 Tested : 16 Jul 2024 Milwaukee, WI : 16 Jul 2024 - Bill Quesnel Unique Number : 5813023 Diagnosed US 532012012 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.

: 11 Jul 2024

Received

Report Id: GTT0000206 [WCAMIS] 02647471 (Generated: 07/16/2024 14:57:14) Rev: 1

Contact/Location: Service Manager - GTT0000206 Page 2 of 2

Johnson Controls - Markham

T:

F:

Accounts Payable A-33, P.O. Box 2012