

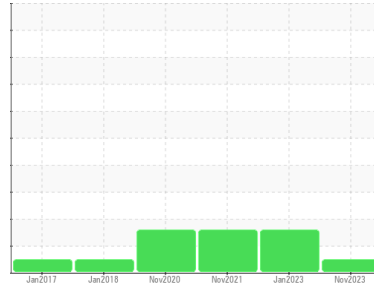


OIL ANALYSIS REPORT



Area
150 Consumers Circ #1 [GTT224-154]
 Machine Id
TRANE U14M00998(1)
 Component
Chiller
 Fluid
TRANE 0048 (--- GAL)

Sample Rating Trend



NORMAL



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.

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	GTT0001196	GTT79557	GTT79558
Sample Date	Client Info	08 Nov 2023	16 Jan 2023	22 Nov 2021
Machine Age	hrs	0	---	---
Oil Age	hrs	0	---	---
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	ATTENTION	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >8	0	<1	<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	<1	---	---
Aluminum	ppm	ASTM D5185(m) >3	0	<1	<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	<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) 1	3	---	---
Barium	ppm	ASTM D5185(m) 0	<1	---	---
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) 5	2	---	---
Zinc	ppm	ASTM D5185(m) 0	<1	<1	<1
Sulfur	ppm	ASTM D5185(m) 10	24	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >15	10	---	---
Sodium	ppm	ASTM D5185(m)	2	---	---
Potassium	ppm	ASTM D5185(m) >20	4	---	---
ppm Water	ppm	ASTM D6304* >300	287	▲ 546	▲ 312

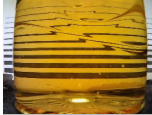

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974* 0.09	0.03	0.013	0.031

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)	68	45.1	---	---

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

GRAPHS



Sample No. : GTT0001196 **Recieved** : 13 Dec 2023
Lab Number : 02602984 **Diagnosed** : 15 Dec 2023
Unique Number : 5696069 **Diagnostician** : Bill Quesnel
Test Package : IND 2 (Additional Tests: KV40)

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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