

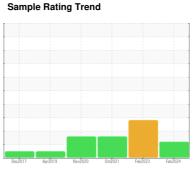
OIL ANALYSIS REPORT

DEGRADATION



Area [818042] TRANE U14L00694(2)
Component Chiller

TRANE 0048 (--- GAL)





DIAGNOSIS

Recommendation

Resample in 3 months to monitor this situation.

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 above the recommended limit.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GTT0002135	GTT79536	GTT79537
Sample Date		Client Info		27 Feb 2024	14 Feb 2023	14 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	ATTENTION
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>8	1	<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	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	2	<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	2		
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)	5	0		
Zinc	ppm	ASTM D5185(m)	0	31	10	3
Sulfur	ppm	ASTM D5185(m)	10	0		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	j	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	6		
Sodium	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	<1		
ppm Water	ppm	ASTM D6304*	>300	176	535	413
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.09	△ 0.16	▲ 0.213	0.239



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	68.7		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						



 Sample No.
 : GTT0002135
 Received
 : 08 Mar 2024

 Lab Number
 : 02620998
 Tested
 : 11 Mar 2024

 Unique Number
 : 5746117
 Diagnosed
 : 11 Mar 2024 - E

Unique Number : 5746117 Diagnosed : 11 Mar 2024 - Bill Quesnel Test Package : IND 2 (Additional Tests: KV40)

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 Inc.

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Quebec, QC CA G1N 2E7

Contact: Service Manager

invoices@ainsworth.com

T: from any cause. F:

Contact/Location: Service Manager - GTT0000601