



# OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION

Area  
**GM Paint Shop Ch#4 #1 [GTT224-483 1-1PBPR8V]**  
 Machine Id  
**TRANE L04F02797(4,1)**  
 Component  
**Chiller**  
 Fluid  
**TRANE 0022 (--- GAL)**



## DIAGNOSIS

### Recommendation

The acid number (AN) indicates that your fluid has reached the end of its useful life, please proceed with a complete oil change. Check for indications of excessive refrigerant charge such as bubbles present in the sight glass. We recommend an early resample to monitor this condition.

### Wear

Iron ppm levels are abnormal. Oil pump wear is indicated. The zinc reading shows corrosion damage occurring on the zinc galvanized spray eliminator screen which is located above the evaporator tube bundle.

### Contamination

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

### Fluid Condition

Acid Number (AN) is abnormally high. Zinc ppm levels are abnormally high. The AN level is above the recommended limit. The oil is no longer serviceable.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GTT0002952</b>	---	---
Sample Date	Client Info	<b>18 Jun 2024</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>8	<b>▲ 22</b>	---	---
Chromium ppm ASTM D5185(m)	>2	<b>0</b>	---	---
Nickel ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Titanium ppm ASTM D5185(m)		<b>0</b>	---	---
Silver ppm ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum ppm ASTM D5185(m)	>3	<b>&lt;1</b>	---	---
Lead ppm ASTM D5185(m)	>2	<b>0</b>	---	---
Copper ppm ASTM D5185(m)	>8	<b>2</b>	---	---
Tin ppm ASTM D5185(m)	>4	<b>&lt;1</b>	---	---
Antimony ppm ASTM D5185(m)		<b>0</b>	---	---
Vanadium ppm ASTM D5185(m)		<b>0</b>	---	---
Beryllium ppm ASTM D5185(m)		<b>0</b>	---	---
Cadmium ppm ASTM D5185(m)		<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185(m)	0	<b>2</b>	---	---
Barium ppm ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum ppm ASTM D5185(m)	0	<b>0</b>	---	---
Manganese ppm ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Magnesium ppm ASTM D5185(m)	0	<b>0</b>	---	---
Calcium ppm ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Phosphorus ppm ASTM D5185(m)	35	<b>4</b>	---	---
Zinc ppm ASTM D5185(m)	0	<b>▲ 274</b>	---	---
Sulfur ppm ASTM D5185(m)	30	<b>23</b>	---	---
Lithium ppm ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>15	<b>9</b>	---	---
Sodium ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Potassium ppm ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
ppm Water ppm ASTM D6304*	>50	<b>16</b>	---	---


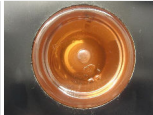
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D974*	0.05	<b>▲ 0.35</b>	---	---

# OIL ANALYSIS REPORT

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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	47	<b>44.4</b>	---	---

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

## GRAPHS



**Sample No.** : GTT0002952  
**Lab Number** : 02647469  
**Unique Number** : 5813021  
**Test Package** : IND 2 ( Additional Tests: KF, TAN Man )  
**Received** : 11 Jul 2024  
**Tested** : 18 Jul 2024  
**Diagnosed** : 18 Jul 2024 - Bill Quesnel

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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