

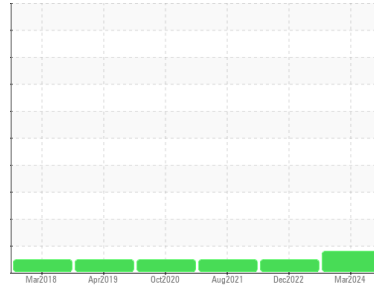


# OIL ANALYSIS REPORT



Area  
**[GTT224-351]**  
 Machine Id  
**CARRIER 4604Q04581(B1)**  
 Component  
**Chiller**  
 Fluid  
**TOTALINE POE 220 VS (--- GAL)**

Sample Rating Trend



WEAR

✓

## DIAGNOSIS

- **Recommendation**  
Resample in 3 months to monitor this situation.
- **Wear**  
Iron ppm levels are noted. Compressor rotor wear, rotor thrust bearing wear, compressor rotor main bearing wear or possibly slide valve wear indicated. All other 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GTT0002295</b>	GTT15068	GTT15069
Sample Date	Client Info		<b>21 Mar 2024</b>	07 Dec 2022	19 Aug 2021
Machine Age	hrs Client Info		<b>0</b>	---	---
Oil Age	hrs Client Info		<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m)	>8	● <b>6</b>	1	<1
Chromium	ppm ASTM D5185(m)	>2	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Lead	ppm ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185(m)	>8	<b>3</b>	<1	<1
Tin	ppm ASTM D5185(m)	>4	<b>0</b>	<1	<1
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>&lt;1</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>0</b>	---	---
Magnesium	ppm ASTM D5185(m)	0	<b>2</b>	---	---
Calcium	ppm ASTM D5185(m)	0	<b>0</b>	---	---
Phosphorus	ppm ASTM D5185(m)	75	<b>36</b>	---	---
Zinc	ppm ASTM D5185(m)	0	<b>7</b>	1	<1
Sulfur	ppm ASTM D5185(m)	25	<b>14</b>	---	---
Lithium	ppm ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>15	<b>23</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*	>200	<b>0</b>	107	132



## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.01	<b>0.02</b>	0.003	0.023

# 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>NONE</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)	220	<b>111</b>	---

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

## GRAPHS



**Sample No.** : GTT0002295  
**Lab Number** : 02625919  
**Unique Number** : 5759051  
**Test Package** : IND 2 ( Additional Tests: KV40 )

**Received** : 01 Apr 2024  
**Tested** : 04 Apr 2024  
**Diagnosed** : 04 Apr 2024 - Bill Quesnel

**Carrier Commercial Services**  
 1040 South Service Road  
 Stoney Creek, ON  
 CA L8E 6G3  
 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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F: