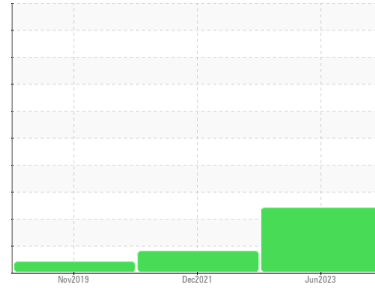


Area
Abbot POC Ch#3 Comp#1 [4500054809]
 Machine Id
YORK 2KTM001637(3,1)
 Component
Chiller
 Fluid
REFRIGERATION OIL (POE) (--- GAL)



DIAGNOSIS

Recommendation

This unit should be monitored closely by a service engineer. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Iron ppm levels are abnormal. The abnormal iron reading indicates possible wear occurring on the rotor main bearings, the rotor thrust bearings, the rotors or the slide valve assembly (if equipped).

Contamination

The elevated moisture content is associated with POE oils which are hygroscopic, and can absorb moisture from sampling and processing.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GTT0001433	GTT10580	GTT10581
Sample Date	Client Info	21 Jun 2023	07 Dec 2021	07 Nov 2019
Machine Age	hrs	0	---	---
Oil Age	hrs	0	---	---
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	MARGINAL

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185(m) >8	▲ 87	▲ 48	22
Chromium ppm	ASTM D5185(m) >2	<1	<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	4	3	<1
Tin ppm	ASTM D5185(m) >4	<1	<1	2
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	2	---	---
Barium ppm	ASTM D5185(m) 0	1	---	---
Molybdenum ppm	ASTM D5185(m) 0	0	---	---
Manganese ppm	ASTM D5185(m) 0	1	---	---
Magnesium ppm	ASTM D5185(m) 0	2	---	---
Calcium ppm	ASTM D5185(m) 10	<1	---	---
Phosphorus ppm	ASTM D5185(m) 250	<1	---	---
Zinc ppm	ASTM D5185(m) 0	78	38	▲ 22
Sulfur ppm	ASTM D5185(m) 400	34	---	---
Lithium ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185(m) >15	17	---	---
Sodium ppm	ASTM D5185(m)	1	---	---
Potassium ppm	ASTM D5185(m) >20	1	---	---
ppm Water	ASTM D6304* >200	▲ 312	247	327



FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D974* 0.07	0.09	0.084	0.029

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)	87.0	---	---

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

GRAPHS



Sample No. : GTT0001433 **Recieved** : 03 Jan 2024
Lab Number : **02606336** **Diagnosed** : 09 Jan 2024
Unique Number : 5707422 **Diagnostician** : 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.

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