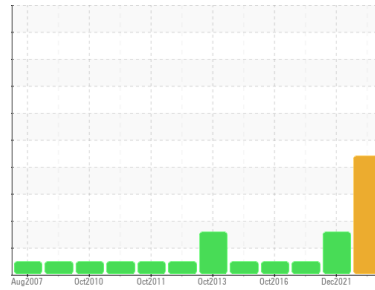




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
Miramichi Lodge #1 Circ B
 Machine Id
CARRIER 1805F13649(B1)
 Component
Chiller
 Fluid
CASTROL AIRCOL SW 220 (--- GAL)

DIAGNOSIS

Recommendation

If not recently done change any filter driers to reduce moisture level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Copper, lead and iron ppm levels are marginal. All other component wear rates are normal. The high metal levels indicate corrosion in the system.

Contamination

The elevated moisture content is associated with POE oils which are hygroscopic, and can absorb moisture from sampling and processing. There is visible rust/corrosion particles visible in the oil sample.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GTT0001342	GTT7064	GTT7065
Sample Date	Client Info		04 Aug 2023	07 Dec 2021	01 Dec 2017
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >8	▲ 7	3	2
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	▲ 5	<1	<1
Copper	ppm	ASTM D5185(m) >8	▲ 6	1	<1
Tin	ppm	ASTM D5185(m) >4	<1	<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) 0	<1	---	---
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	<1	---	---
Phosphorus	ppm	ASTM D5185(m) 30	8	---	---
Zinc	ppm	ASTM D5185(m) 0	▲ 19	8	8
Sulfur	ppm	ASTM D5185(m) 30	0	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	12	---	---
Sodium	ppm	ASTM D5185(m)	<1	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---
ppm Water	ppm	ASTM D6304* >200	▲ 357	▲ 376	24


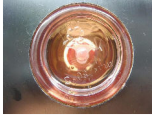
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.03	0.09	0.041	0.101

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)	220	134	---	---

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

GRAPHS



Sample No. : GTT0001342 **Recieved** : 28 Dec 2023
Lab Number : **02605618** **Diagnosed** : 05 Jan 2024
Unique Number : 5698703 **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.

Carrier Commerical Service
 C/O Conduent Div of Carrier Canada, 1-2740 Matheson Blvd
 Mississauga, ON
 CA L4W 4X3
 Contact: Brian Raymundo
 Brian.Raymundo@carrier.com

T:
F: