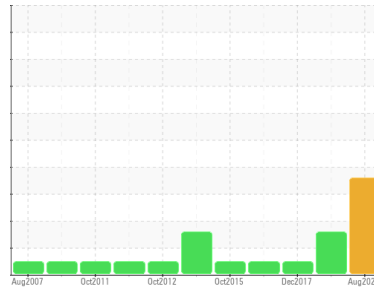




OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Area
Miramichi Lodge #1 Circ A
 Machine Id
CARRIER 1805F13649(A1)
 Component
Chiller
 Fluid
CASTROL AIRCOL SW 220 (--- GAL)

DIAGNOSIS

▲ Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

▲ Wear

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

Contamination

There is visible rust/corrosion particles visible in the oil sample. There is no indication of any contamination in the oil.

▲ Fluid Condition

The AN level is slightly above the recommended limit. The oil is no longer serviceable.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GTT0001231	GTT7054	GTT7055
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	<1
Chromium	ppm	ASTM D5185(m) >2	0	<1	<1
Nickel	ppm	ASTM D5185(m)	0	---	---
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	▲ 8	<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) 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	19	---	---
Zinc	ppm	ASTM D5185(m) 0	37	20	19
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	7	---	---
Sodium	ppm	ASTM D5185(m)	<1	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---
ppm Water	ppm	ASTM D6304* >200	142	▲ 358	32



FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.03	▲ 0.11	0.084	0.129

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	171	---	---

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

GRAPHS



Sample No. : GTT0001231 **Recieved** : 28 Dec 2023
Lab Number : **02605637** **Diagnosed** : 05 Jan 2024
Unique Number : 5698722 **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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