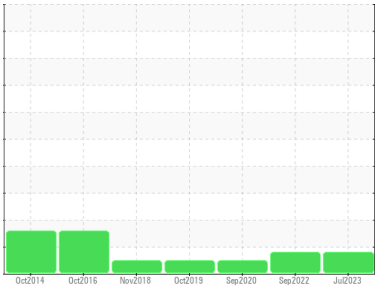
PROBLEM SUMMARY

Area
TCP Ch#1 [2304251382]
Machine Id
MCQUAY STNU060300231
Component
Chiller
Fluid
MOBIL EAL ARTIC ISO 46 (--- GAL)

Sample Rating Trend



WEAR

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**MARGINAL**	MARGINAL	NORMAL
Copper	ppm	ASTM D5185(m)	>100	▲ **21**	▲ 26.0	12.0

Customer Id: GTT0000352
Sample No.: GTT0000030
Lab Number: 02578771
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Bill Quesnel CLS,OMA II,MLA-III,LLA-I +1 (289)291-4641 x4641
Bill.Quesnel@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
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RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

06 Sep 2022 Diag: Wes Davis

WEAR

The elevated copper reading indicates the effects of oil migration through the evaporator (oil loss from the compressor) possibly occurring during intervals of operation at low cooling load conditions. All other readings are in normal ranges.

view report

23 Sep 2020 Diag: Wes Davis

NORMAL

The test results indicate normal wear patterns for this type of unit with moisture and acidity in the acceptable range. The elevated moisture is associated with synthetic oils.

view report

22 Oct 2019 Diag: Wes Davis

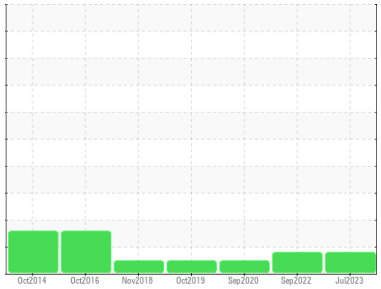
NORMAL

The test results indicate normal wear patterns for this type of unit with the moisture and acidity also in the acceptable range.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
TCP Ch#1 [2304251382]
Machine Id
MCQUAY STNU060300231
Component
Chiller
Fluid
MOBIL EAL ARTIC ISO 46 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
Copper ppm levels are marginal. The elevated copper reading indicates the effects of oil migration through the evaporator (oil loss from the compressor) possibly occurring during intervals of operation at low cooling load conditions. All other readings are in normal ranges.

Contamination
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		**GTT0000030**	GTT72757	GTT72758
Sample Date		Client Info		**28 Jul 2023**	06 Sep 2022	23 Sep 2020
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**MARGINAL**	MARGINAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	---	---
Iron	ppm	ASTM D5185(m)	>100	**7.1**	4.6	3.0
Chromium	ppm	ASTM D5185(m)	>2	**0.0**	0.1	0.1
Nickel	ppm	ASTM D5185(m)		**0.9**	---	---
Titanium	ppm	ASTM D5185(m)		**0.0**	---	---
Silver	ppm	ASTM D5185(m)	>2	**0.0**	---	---
Aluminum	ppm	ASTM D5185(m)	>50	**1.4**	0.1	0.1
Lead	ppm	ASTM D5185(m)	>2	**1.0**	0.1	0.1
Copper	ppm	ASTM D5185(m)	>100	▲ **21**	▲ 26.0	12.0
Tin	ppm	ASTM D5185(m)	>4	**1.2**	0.1	0.1
Antimony	ppm	ASTM D5185(m)		**0.0**	---	---
Vanadium	ppm	ASTM D5185(m)		**0.0**	---	---
Beryllium	ppm	ASTM D5185(m)		**0.0**	---	---
Cadmium	ppm	ASTM D5185(m)		**0.0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**0.8**	---	---
Barium	ppm	ASTM D5185(m)		**0.0**	---	---
Molybdenum	ppm	ASTM D5185(m)		**0.0**	---	---
Manganese	ppm	ASTM D5185(m)		**0.5**	---	---
Magnesium	ppm	ASTM D5185(m)		**0.0**	---	---
Calcium	ppm	ASTM D5185(m)		**0.4**	---	---
Phosphorus	ppm	ASTM D5185(m)		**8.9**	---	---
Zinc	ppm	ASTM D5185(m)		**27**	13.1	12.9
Sulfur	ppm	ASTM D5185(m)		**51**	---	---
Lithium	ppm	ASTM D5185(m)		**0.3**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**5.6**	---	---
Sodium	ppm	ASTM D5185(m)		**1.5**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**1.0**	---	---
Water	%	ASTM D6304*	>0.01	**0.061**	---	---
ppm Water	ppm	ASTM D6304*	>100	**613.1**	69	124

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.1	**0.08**	0.071	0.060

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	**FREON**	---	---
Emulsified Water	scalar	Visual*	>0.01	**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	49.2	**38.2**	---	---

SAMPLE IMAGES				current	history1	history2
Color					*no image*	*no image*
Bottom					*no image*	*no image*

GRAPHS

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GTT0000030 **Received** : 28 Aug 2023
Lab Number : 02578771 **Diagnosed** : 01 Sep 2023
Unique Number : 5631831 **Diagnostician** : Bill Quesnel
Test Package : IND 2 (Additional Tests: KF, TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

Daikin Applied Canada Inc.
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Vaughan, ON
CA L4L 8A3
Contact: Service Manager

T:
F: