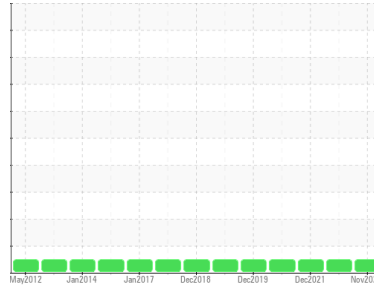




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area

[SV2309071134/1]

Machine Id

MCQUAY MARYMOUNT UNIVERSITY CHILLER 2 WSC063 (S/N STNU091200057)

Component

Refrigeration Compressor

Fluid

ICI EMKARATE RL 46H (6 GAL)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### 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		<b>WC0783415</b>	WC0660653	WC0525380
Sample Date	Client Info		<b>29 Nov 2023</b>	12 Dec 2022	01 Dec 2021
Machine Age	hrs	Client Info	<b>0</b>	35060	29803
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Not Changd	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>13</b>	14	14
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >50	<b>&lt;1</b>	1	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >100	<b>15</b>	19	21
Tin	ppm	ASTM D5185m >4	<b>2</b>	2	1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	2
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	1
Phosphorus	ppm	ASTM D5185m 1900	<b>1</b>	6	8
Zinc	ppm	ASTM D5185m 0	<b>30</b>	31	22
Sulfur	ppm	ASTM D5185m 25	<b>40</b>	78	0

## CONTAMINANTS

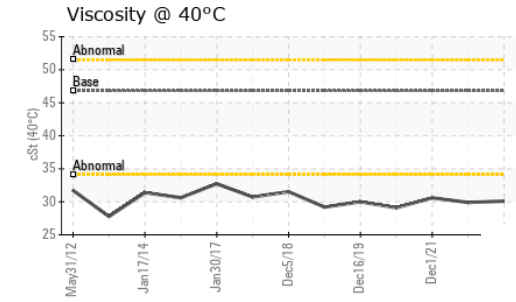
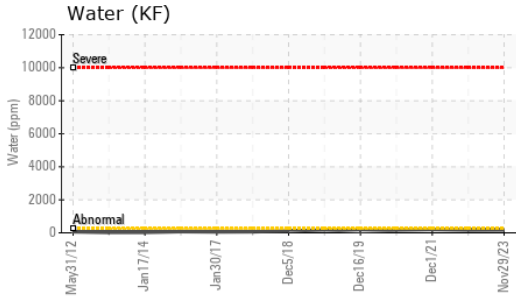
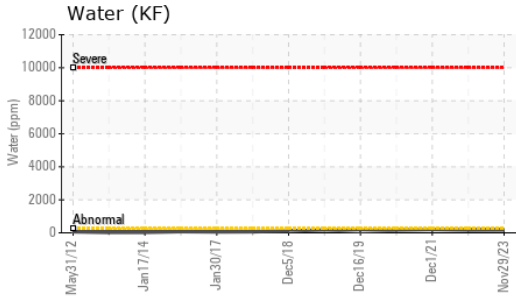
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>15</b>	17	17
Sodium	ppm	ASTM D5185m	<b>1</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304 >0.02	<b>0.016</b>	0.015	0.020
ppm Water	ppm	ASTM D6304 >250	<b>166</b>	155.3	200.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.03	<b>0.1</b>	0.015	0.087



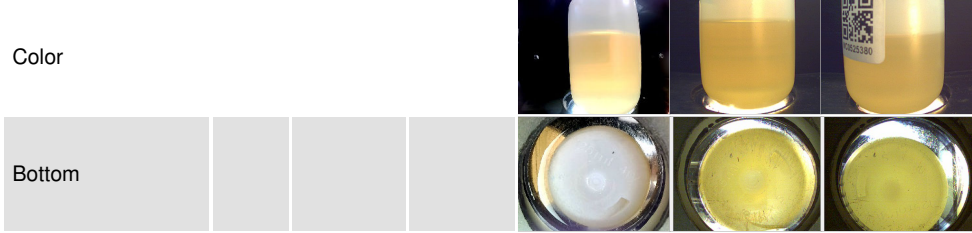
# OIL ANALYSIS REPORT



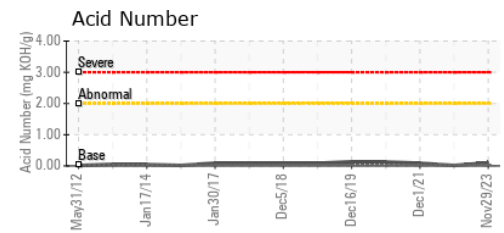
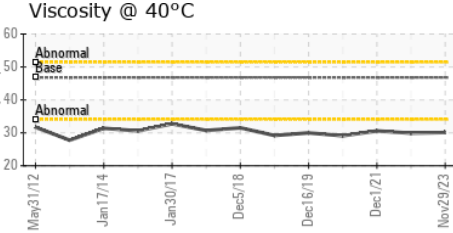
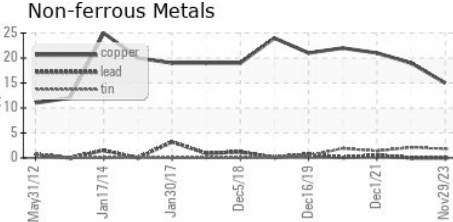
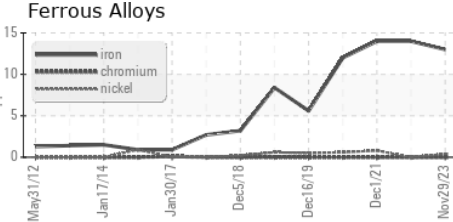
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.02	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46.8	30.1	29.9	30.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0783415 **Received** : 10 Jan 2024  
**Lab Number** : 06056774 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10822723 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**DAIKIN APPLIED**  
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 andrew.turlington@daikinapplied.com  
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To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)