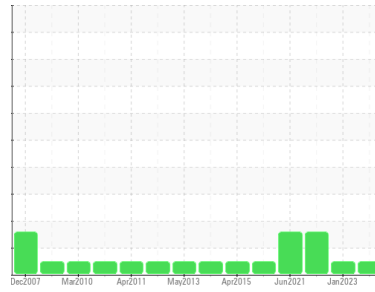




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**MCQUAY VBCC CHILLER 2 (S/N STNU040500262)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**REFRIG COMP OIL ISO 32 (8 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>WCI2310929</b>	WCI2310930	WC0430732
Sample Date	Client Info		<b>02 Mar 2024</b>	19 Jan 2023	21 Apr 2022
Machine Age	hrs	Client Info	<b>9770</b>	6160	4297
Oil Age	hrs	Client Info	<b>9770</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	MARGINAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>2</b>	<1	3
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >50	<b>2</b>	0	<1
Lead	ppm	ASTM D5185m >2	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m >100	<b>2</b>	1	6
Tin	ppm	ASTM D5185m >4	<b>2</b>	0	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>0</b>	0	1
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m 12	<b>3</b>	0	0
Phosphorus	ppm	ASTM D5185m 12	<b>5</b>	2	1
Zinc	ppm	ASTM D5185m 12	<b>2</b>	0	0
Sulfur	ppm	ASTM D5185m 1000	<b>0</b>	24	0

## CONTAMINANTS

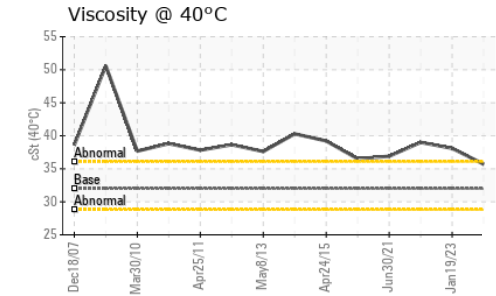
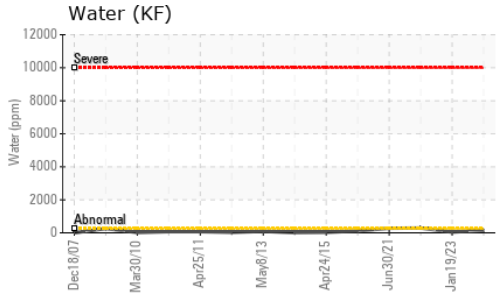
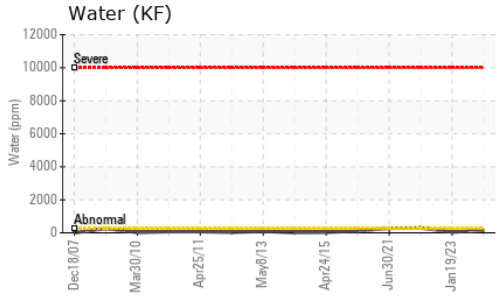
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>11</b>	10	14
Sodium	ppm	ASTM D5185m	<b>2</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	<1
Water	%	ASTM D6304 >0.02	<b>0.014</b>	0.004	▲ 0.029
ppm Water	ppm	ASTM D6304 >250	<b>147</b>	45.1	▲ 290.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.10	<b>0.042</b>	0.092	0.052



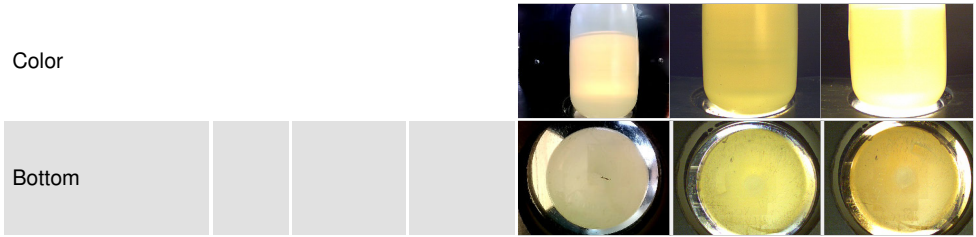
# OIL ANALYSIS REPORT



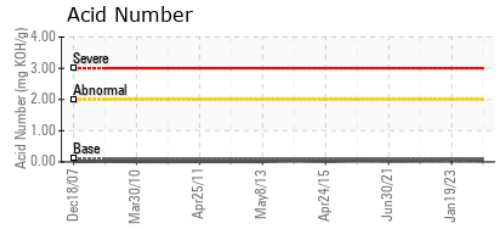
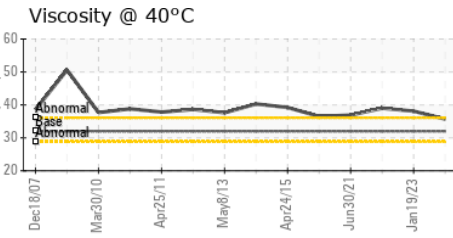
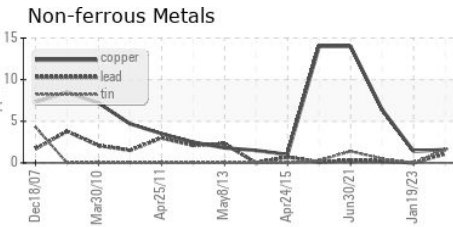
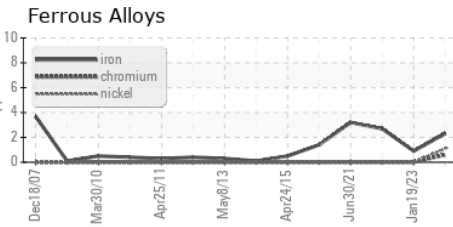
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 32	<b>35.7</b>	38.1	39.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC12310929      **Received** : 12 Apr 2024  
**Lab Number** : **06147392**      **Tested** : 15 Apr 2024  
**Unique Number** : 10977470      **Diagnosed** : 16 Apr 2024 - Don Baldrige  
**Test Package** : IND 2

**DAIKIN APPLIED-RICHMOND**  
 8991 OLD STAPLES MILL ROAD  
 HENRICO, VA 23228  
 Contact: AMANDA CARRIER  
 amanda.carrier@daikinapplied.com  
 T: (804)747-4822  
 F: (804)747-6686

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)