



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>MARGINAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**NESTLE WATERS CHILLER 2 (S/N 10241E65075475)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**FRICK COMPRESSOR OIL #11 (150 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>USP0011527</b>	USP250827	USP250818
Sample Date		Client Info		<b>02 May 2024</b>	24 Oct 2023	20 Jun 2023
Machine Age	hrs	Client Info		<b>34556</b>	34011	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	406	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Sample Status				<b>MARGINAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>8	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>3	<b>0</b>	1	0
Lead	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>8	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

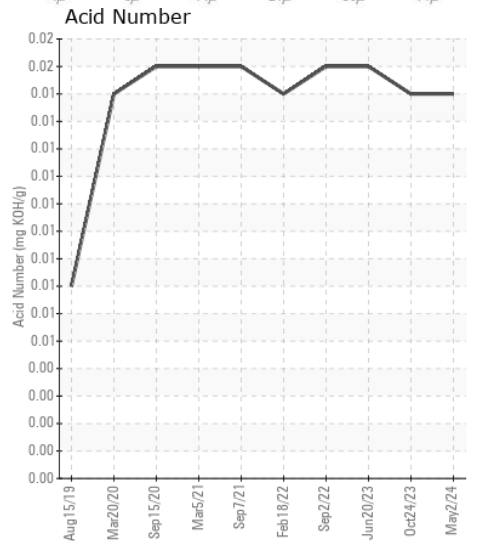
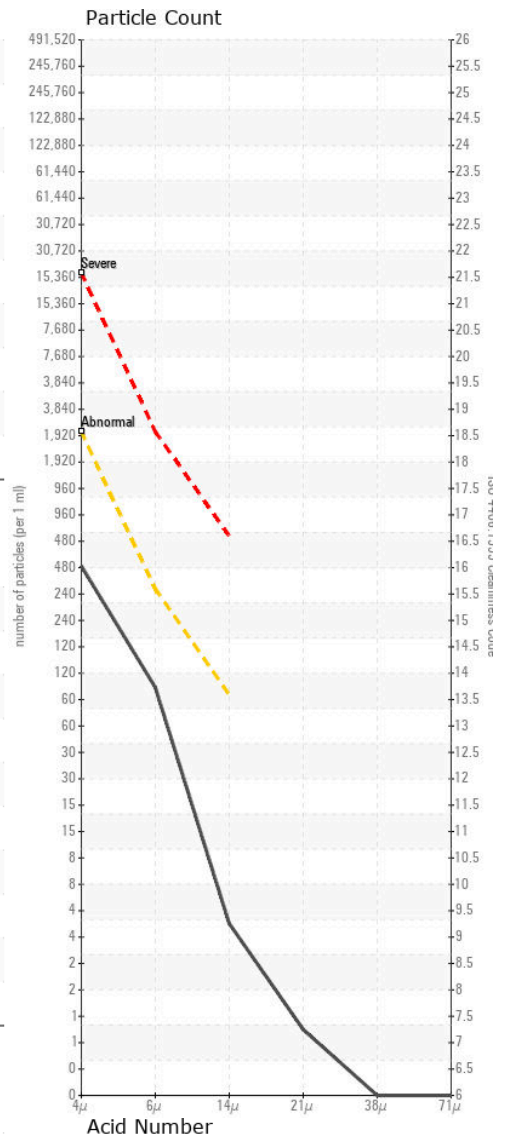
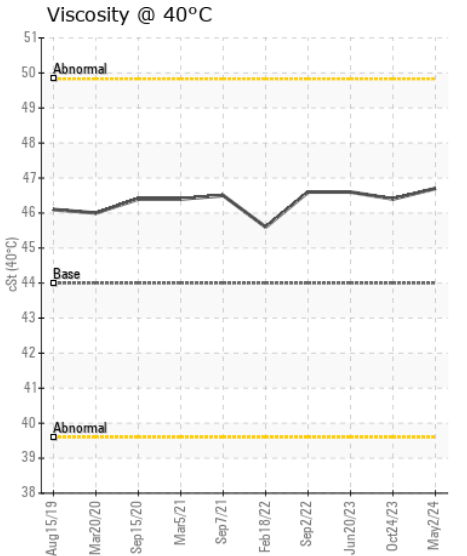
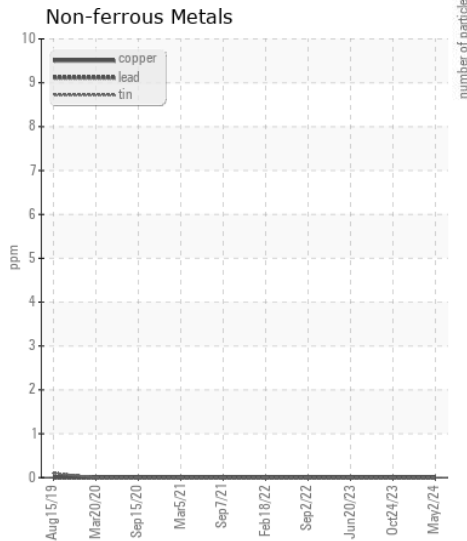
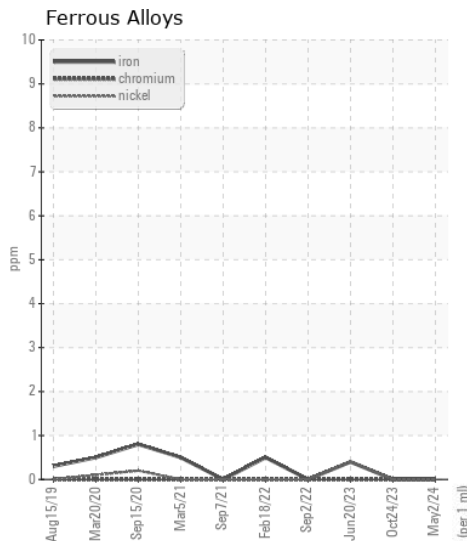
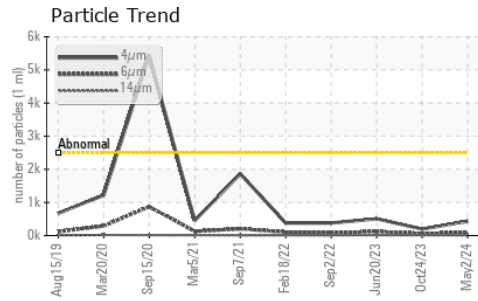
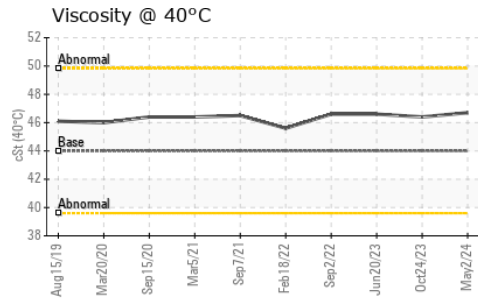
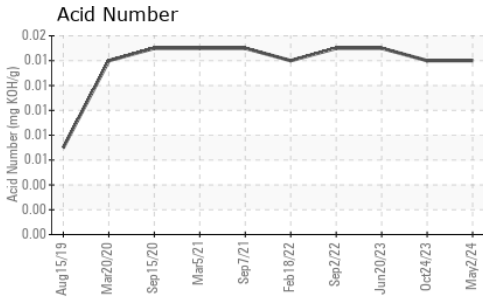
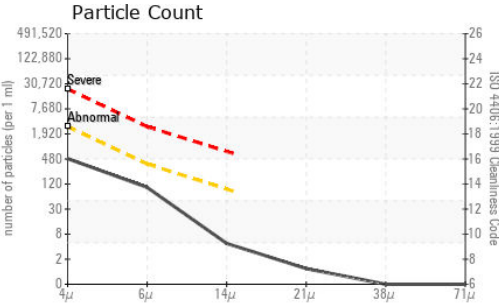
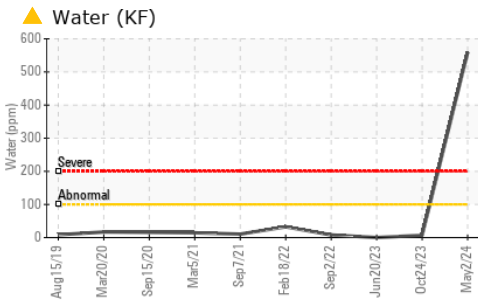
There is a trace of moisture present in the oil(confirmed). The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Water	%	ASTM D6304	>0.01	<b>▲ 0.055</b>	0.001	0.00
ppm Water	ppm	ASTM D6304	>100	<b>▲ 559</b>	7	0.00
Particles >4µm		ASTM D7647	>2500	<b>431</b>	196	507
Particles >6µm		ASTM D7647	>320	<b>88</b>	60	120
Particles >14µm		ASTM D7647	>80	<b>4</b>	10	12
Particles >21µm		ASTM D7647	>20	<b>1</b>	4	5
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>18/15/13	<b>16/14/9</b>	15/13/10	16/14/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>2</b>	0	<1
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>0</b>	0	0
Acid Number (AN)	mg KOH/g	ASTM D974		<b>0.014</b>	0.014	0.015
Visc @ 40°C	cSt	ASTM D445	44.0	<b>46.7</b>	46.4	46.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : USP0011527

Lab Number : 06189268

Unique Number : 11046020

Test Package : IND 2

Received : 23 May 2024

Tested : 29 May 2024

Diagnosed : 29 May 2024 - Jonathan Hester

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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)