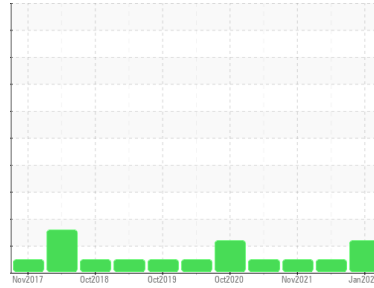




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**NORTH PLANT**  
Machine Id  
**SULLAIR NP-COMP 02 (S/N 201407180014)**  
Component  
**Compressor**  
Fluid  
**ULTRACHEM PALEXTRA 44 (5 QTS)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present 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>WC0884869</b>	WC0696325	WC0629912
Sample Date	Client Info	<b>10 Jan 2024</b>	18 May 2022	02 Nov 2021
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	0
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</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>	<1	<1
Barium	ppm	ASTM D5185m	0.3	<b>0</b>	35	36
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	0.3	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	0.4	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	689	<b>349</b>	341	313
Zinc	ppm	ASTM D5185m	0	<b>0</b>	3	2
Sulfur	ppm	ASTM D5185m	1237	<b>148</b>	236	231

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	4	<1
Sodium	ppm	ASTM D5185m		<b>36</b>	41	46
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Water	%	ASTM D6304	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>10000	<b>▲ 13246</b>	---	---
Particles >6µm	ASTM D7647	>2500	<b>▲ 3074</b>	---	---
Particles >14µm	ASTM D7647	>320	<b>99</b>	---	---
Particles >21µm	ASTM D7647	>80	<b>18</b>	---	---
Particles >38µm	ASTM D7647	>20	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 21/19/14</b>	---	---

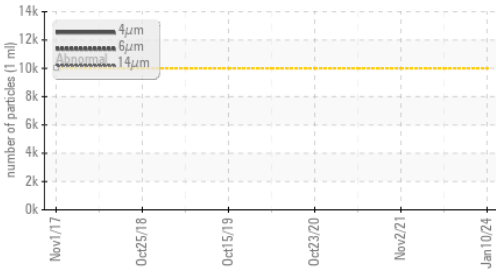
## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.135	<b>0.34</b>	0.24	0.189



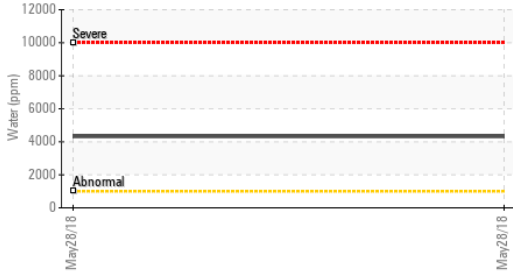
# OIL ANALYSIS REPORT

### Particle Trend



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

### Water (KF)



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44.62	45.0	43.2

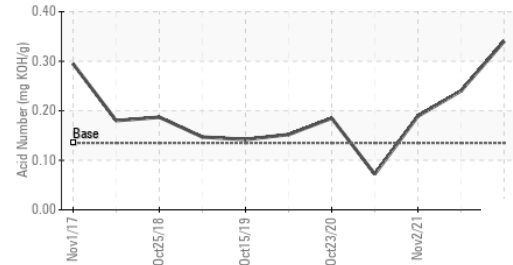
SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color



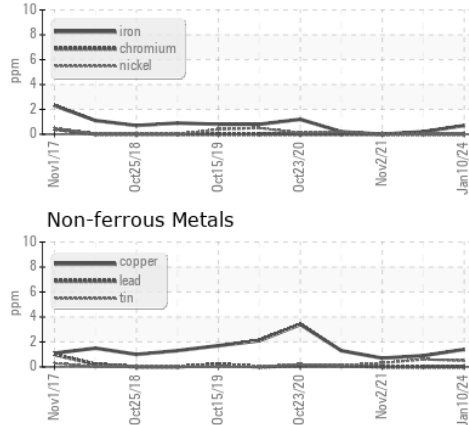
Bottom

### Acid Number

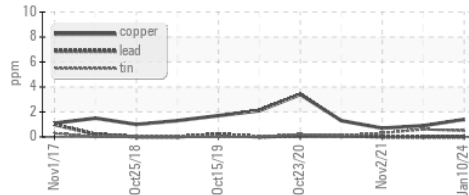


### GRAPHS

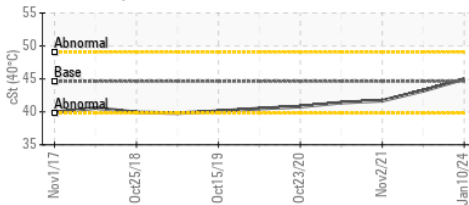
#### Ferrous Alloys



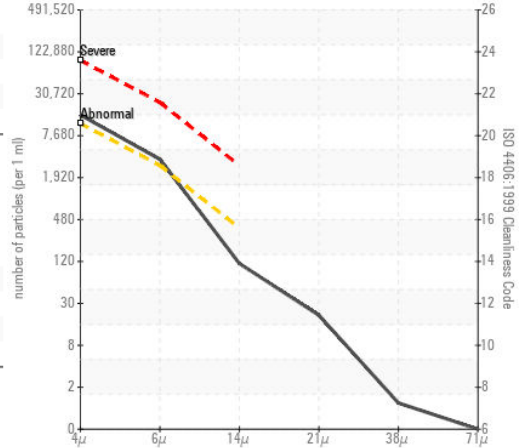
#### Non-ferrous Metals



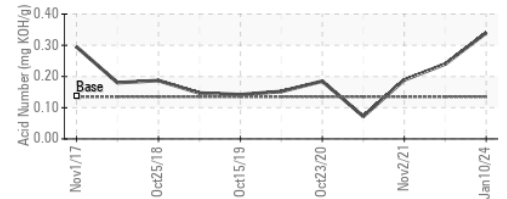
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0884869 **Received** : 11 Jan 2024  
**Lab Number** : 06058056 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829438 **Diagnostician** : Doug Bogart  
**Test Package** : PLANT

**LUND BOATS**  
 318 WEST GILMAN ST  
 NEW YORK MILLS, MN  
 US 56567  
 Contact: TODD PITMAN  
 todd.pitman@lundboats.com

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)

T:  
F: