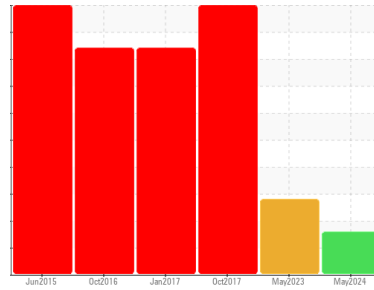




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id

**RACK A**

Component

**Refrigeration Compressor**

Fluid

**Copeland Ultra 32-3MAF (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component. We were unable to perform a particle count due to insufficient sample.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a light concentration of water present in the oil.

### Fluid Condition

An increase in the AN level is noted. Confirmed. Confirm oil type.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC06195515</b>	WC05850585	WCI2328461
Sample Date	Client Info		<b>29 May 2024</b>	10 May 2023	31 Oct 2017
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	SEVERE

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>12</b>	23	▲ 385
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>&lt;1</b>	3	<1
Lead	ppm	ASTM D5185m >2	<b>0</b>	<1	▲ 19
Copper	ppm	ASTM D5185m >8	<b>0</b>	15	15
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	2	10
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>3</b>	7	0
Calcium	ppm	ASTM D5185m 0	<b>2</b>	0	0
Phosphorus	ppm	ASTM D5185m 600	<b>0</b>	0	0
Zinc	ppm	ASTM D5185m 0	<b>0</b>	14	38
Sulfur	ppm	ASTM D5185m 50	<b>0</b>	0	0

## CONTAMINANTS

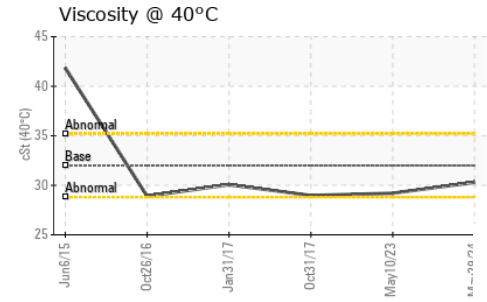
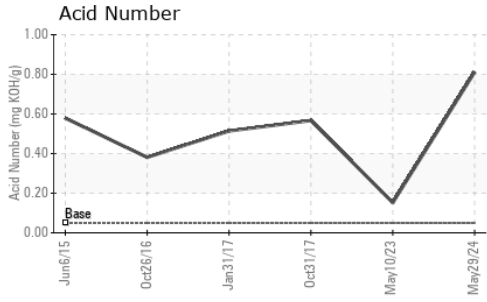
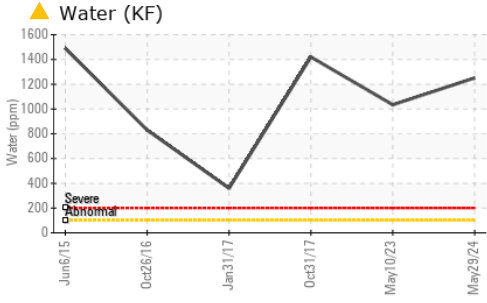
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>0</b>	7	7
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	0
Water	%	ASTM D6304 >0.01	▲ <b>0.125</b>	▲ 0.103	▲ 0.142
ppm Water	ppm	ASTM D6304 >100	▲ <b>1251</b>	▲ 1034.1	▲ 1420

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.05	<b>0.811</b>	0.152	0.567



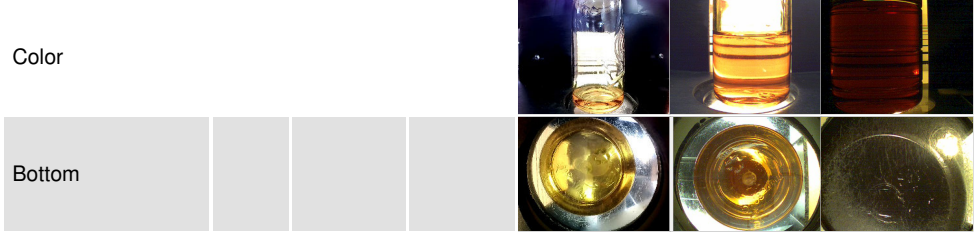
# OIL ANALYSIS REPORT



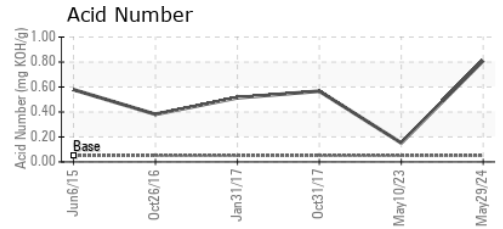
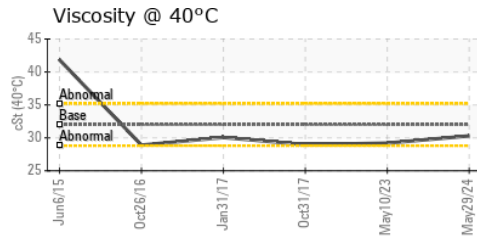
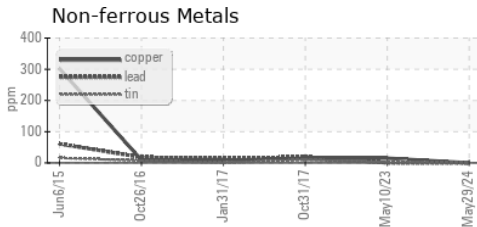
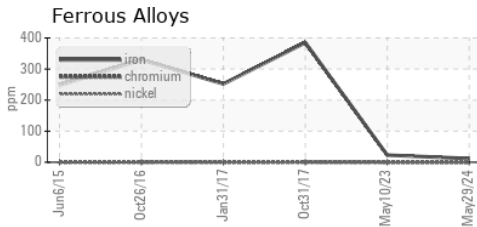
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 32.0	30.3	29.2	28.97

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC06195515      **Received** : 30 May 2024  
**Lab Number** : 06195515      **Tested** : 31 May 2024  
**Unique Number** : 11057638      **Diagnosed** : 02 Jun 2024 - Doug Bogart  
**Test Package** : IND 2

**ALMA FOODS**  
 110 E 1ST  
 ALMA, KS  
 US 66401  
 Contact: JAY WHEELER

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)

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