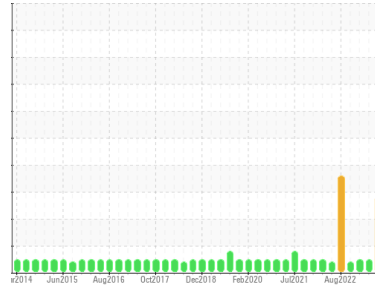




# PROBLEM SUMMARY

Area  
**LFC-1030-CM-01-CM005 [1786984]**  
 Machine Id  
**CM05ST05-1030 - STARTER VAT 5**  
 Component  
**Gearbox**  
 Fluid  
**LE 4220 (3 GAL)**

Sample Rating Trend



**WATER**



## COMPONENT CONDITION SUMMARY

No relevant graphs to display

### RECOMMENDATION

Check seals and/or filters for points of contaminant entry. We advise that you follow the water drain-off procedure for this component. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition.

### PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Debris	scalar	*Visual	NONE	▲ MODER	NONE	LIGHT
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML	NORML
Free Water	scalar	*Visual		▲ 1.0	NEG	NEG

Customer Id: LEPALL  
 Sample No.: WC0823798  
 Lab Number: 05922360  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

## HISTORICAL DIAGNOSIS

### 12 May 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 16 Feb 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 22 Nov 2022 Diag: Angela Borella

VIS DEBRIS



We advise that you check all areas where debris can enter the system. Inspect/change air breather. Resample at the next service interval to monitor. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

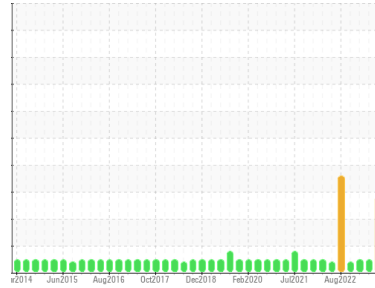
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**LFC-1030-CM-01-CM005 [1786984]**  
 Machine Id  
**CM05ST05-1030 - STARTER VAT 5**  
 Component  
**Gearbox**  
 Fluid  
**LE 4220 (3 GAL)**

## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. We advise that you follow the water drain-off procedure for this component. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris present in the oil. Free water present.

### Fluid Condition

The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0823798</b>	WC0819635	WC0767403
Sample Date	Client Info	<b>03 Aug 2023</b>	12 May 2023	16 Feb 2023
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>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	<b>18</b>	11	22
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	0	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	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	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	2	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>131</b>	154	160
Zinc	ppm	ASTM D5185m	<b>0</b>	0	<1
Sulfur	ppm	ASTM D5185m	<b>2218</b>	2193	1515

## CONTAMINANTS

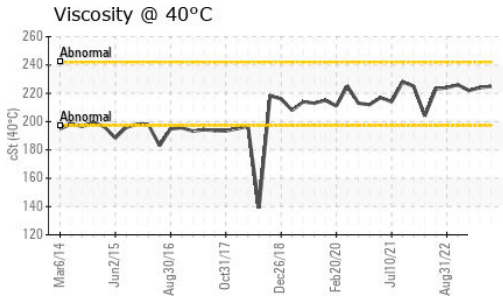
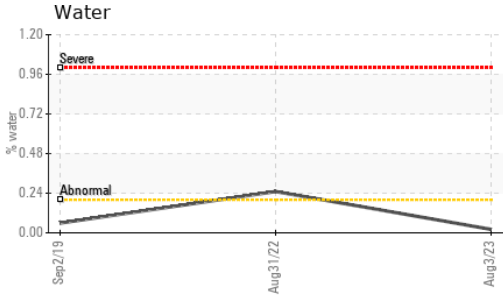
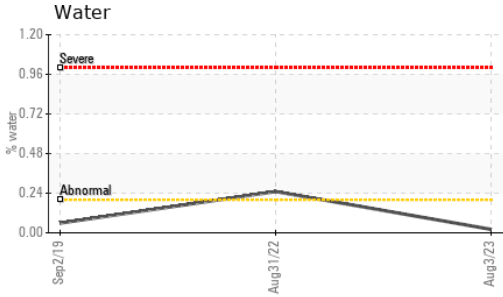
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>2</b>	1	5
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	<1
Water	%	ASTM D6304 >0.2	<b>0.021</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>210</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.39</b>	0.39	0.38



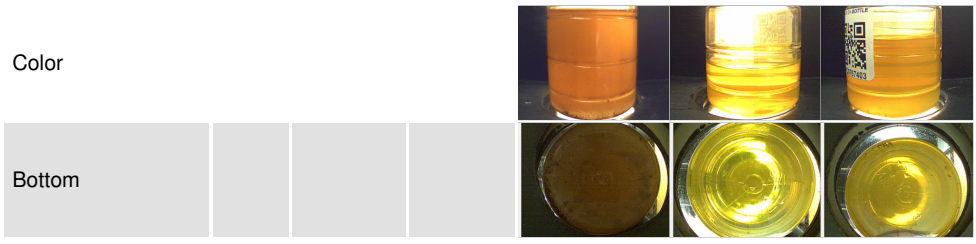
# OIL ANALYSIS REPORT



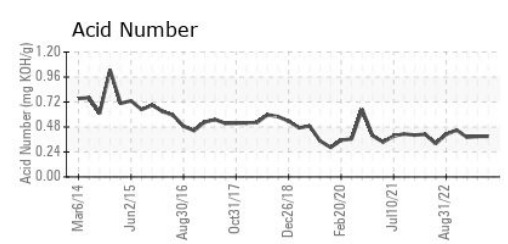
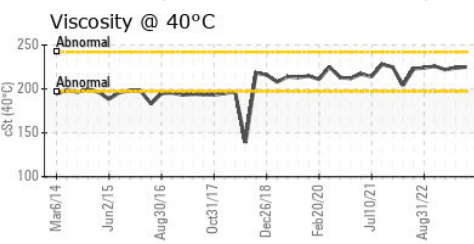
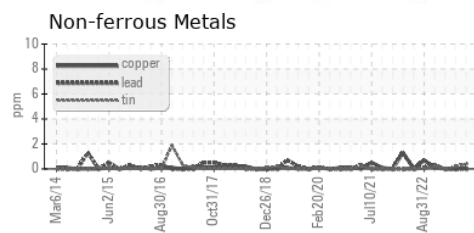
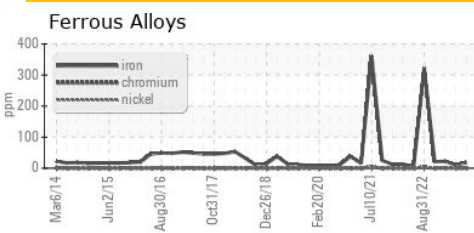
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	<b>MODER</b>	NONE
Debris	scalar	*Visual	NONE	<b>▲ MODER</b>	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>▲ HAZY</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>0.2%</b>	NEG
Free Water	scalar	*Visual		<b>▲ 1.0</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>225</b>	224	222

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0823798 **Received** : 11 Aug 2023  
**Lab Number** : **05922360** **Diagnosed** : 14 Aug 2023  
**Unique Number** : 10602307 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF )

**LEPRINO FOODS - ALLENDALE**  
 4700 RICH STREET  
 ALLENDALE, MI  
 US 49401  
 Contact: BILL FERRIER  
 BFERRIER@LEPRINOFOODS.COM  
 T:  
 F:

Certificate L2367  
 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)