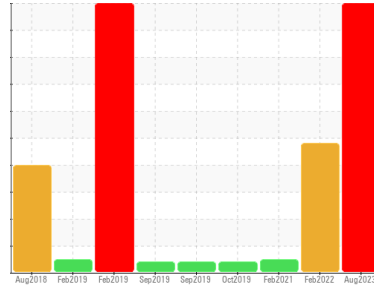




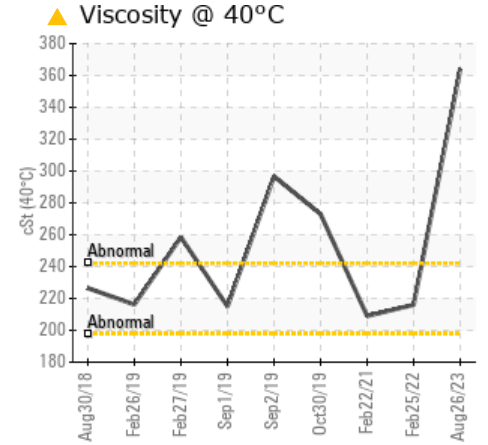
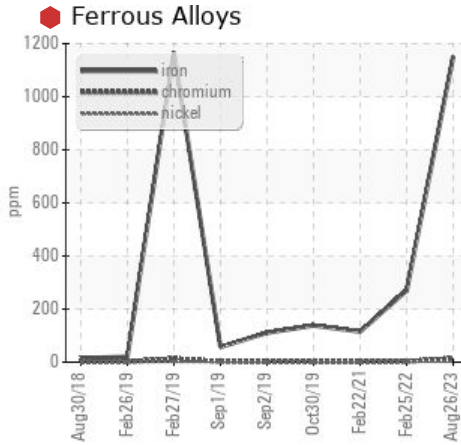
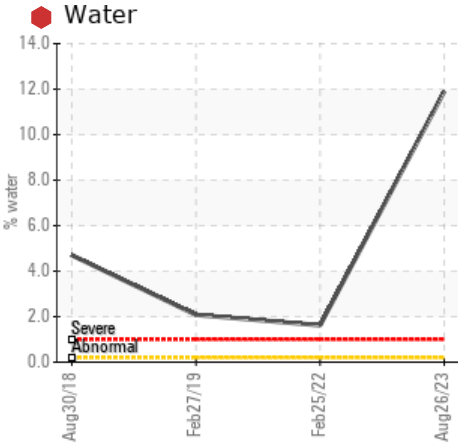
PROBLEM SUMMARY

Area
LFC-1030-CM-01-CM030
 Machine Id
DM01MT01
 Component
Gearbox
 Fluid
LE 4220 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. Inspect/change air breather if applicable. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>200	1152	270	115
Chromium	ppm	ASTM D5185m	>15	14	2	1
Water	%	ASTM D6304	>0.2	11.9	1.62	---
ppm Water	ppm	ASTM D6304	>2000	119000	16200	---
Appearance	scalar	*Visual	NORML	MILKY	MILKY	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	0.2%	NEG
Visc @ 40°C	cSt	ASTM D445		364	216	209

Customer Id: LEPALL
 Sample No.: WC0851567
 Lab Number: 05938384
 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

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
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 Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

25 Feb 2022 Diag: Aaron Black

WATER



We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Iron ppm levels are abnormal. Gear wear is indicated. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



22 Feb 2021 Diag: Wes Davis

NORMAL



Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 220. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. 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



30 Oct 2019 Diag: Doug Bogart

VISCOSITY



The oil change at the time of sampling has been noted. 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 oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

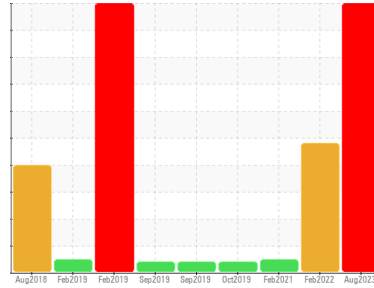
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Area
LFC-1030-CM-01-CM030
 Machine Id
DM01MT01
 Component
Gearbox
 Fluid
LE 4220 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. Inspect/change air breather if applicable. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated.

Contamination

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

Fluid Condition

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0851567	WC0669139	WC0555634
Sample Date	Client Info		26 Aug 2023	25 Feb 2022	22 Feb 2021
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Changed	Not Changed	N/A
Sample Status			SEVERE	SEVERE	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	1152	270	115
Chromium	ppm	ASTM D5185m >15	14	2	1
Nickel	ppm	ASTM D5185m >15	2	3	0
Titanium	ppm	ASTM D5185m	1	<1	<1
Silver	ppm	ASTM D5185m	0	<1	<1
Aluminum	ppm	ASTM D5185m >25	6	5	0
Lead	ppm	ASTM D5185m >100	1	<1	0
Copper	ppm	ASTM D5185m >200	3	1	1
Tin	ppm	ASTM D5185m >25	4	2	<1
Antimony	ppm	ASTM D5185m >5	---	1	0
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	95	31	6
Barium	ppm	ASTM D5185m	0	13	<1
Molybdenum	ppm	ASTM D5185m	<1	<1	0
Manganese	ppm	ASTM D5185m	7	2	<1
Magnesium	ppm	ASTM D5185m	0	6	<1
Calcium	ppm	ASTM D5185m	12	8	2
Phosphorus	ppm	ASTM D5185m	467	396	408
Zinc	ppm	ASTM D5185m	239	106	103
Sulfur	ppm	ASTM D5185m	18566	8066	8235

CONTAMINANTS

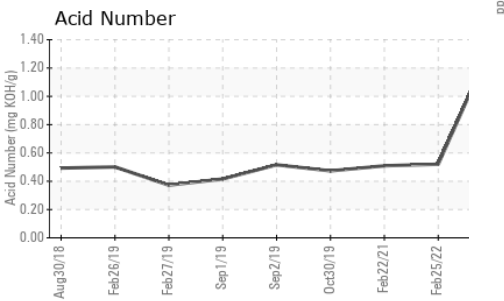
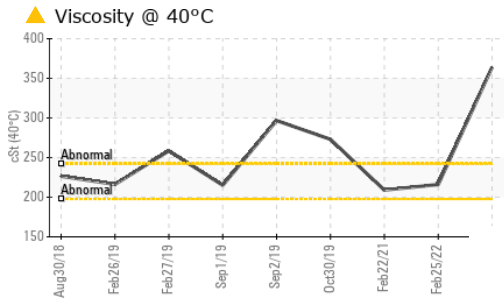
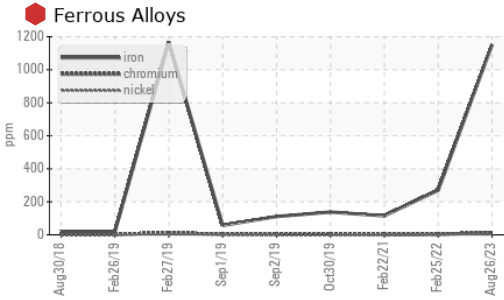
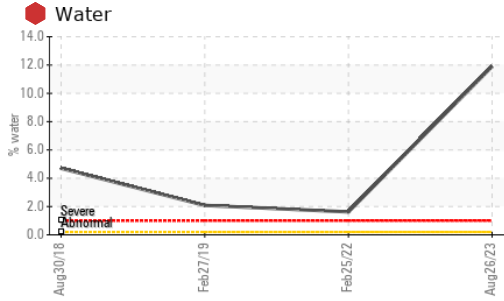
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	18	7	4
Sodium	ppm	ASTM D5185m	561	183	17
Potassium	ppm	ASTM D5185m >20	14	8	2
Water	%	ASTM D6304 >0.2	11.9	1.62	---
ppm Water	ppm	ASTM D6304 >2000	119000	16200	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.37	0.52	0.509



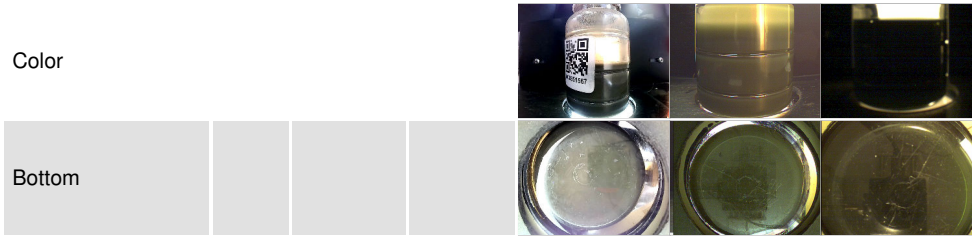
OIL ANALYSIS REPORT



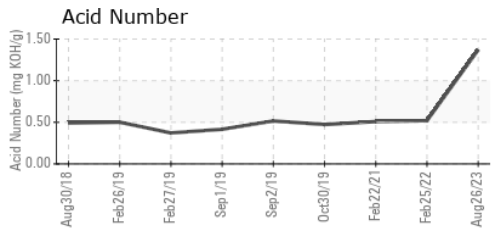
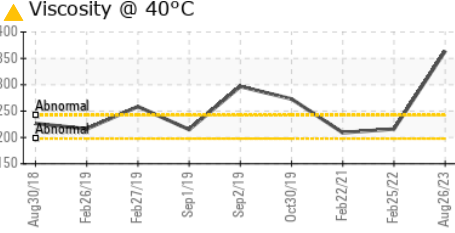
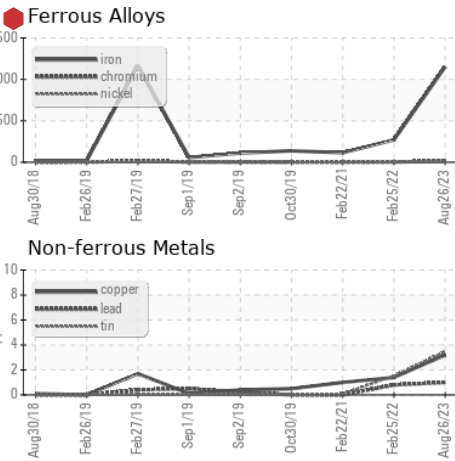
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	▲ 364	216	209

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0851567 **Received** : 30 Aug 2023
Lab Number : 05938384 **Diagnosed** : 31 Aug 2023
Unique Number : 10628996 **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

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: