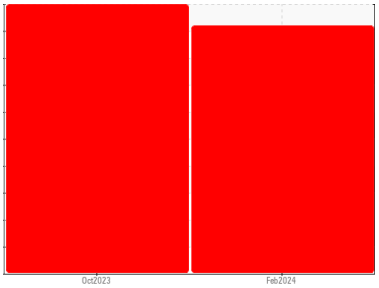
PROBLEM SUMMARY

Sample Rating Trend

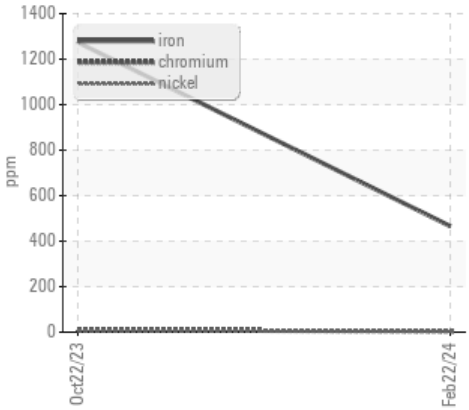


WEAR

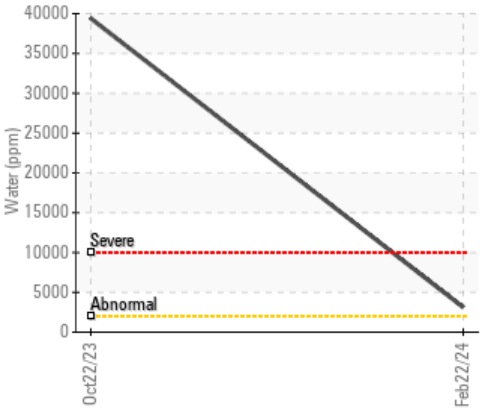
Machine Id
WALKER GEARBOX 1 (S/N S531356)
Component
Lower Gearbox
Fluid
USPI GEAR 460 (--- GAL)

COMPONENT CONDITION SUMMARY

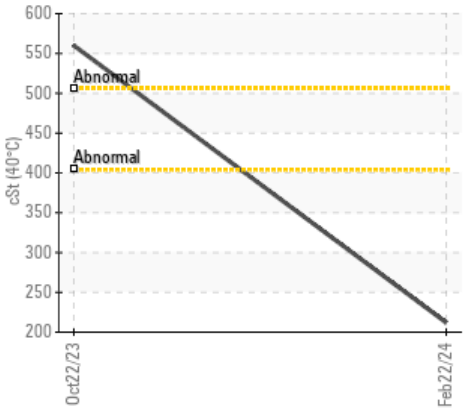
Ferrous Alloys



Water (KF)



Viscosity @ 40°C



RECOMMENDATION

We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	---
Iron	ppm	ASTM D5185m	>200	**466**	1274	---
Water	%	ASTM D6304	>0.2	**0.312**	3.94	---
ppm Water	ppm	ASTM D6304	>2000	**3120**	39400	---
Silt	scalar	*Visual	NONE	**MODER**	NONE	---
Debris	scalar	*Visual	NONE	**MODER**	MODER	---

Customer Id: LANMELMN
Sample No.: USPM30103
Lab Number: 06098469
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@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 Filter	---	---	?	We recommend you service the filters on this component if applicable.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

22 Oct 2023 Diag: Doug Bogart

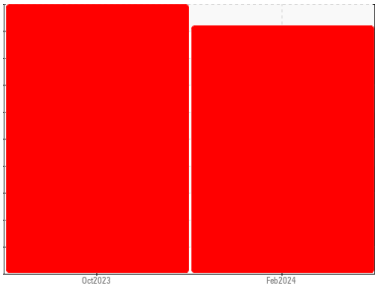
WEAR

We advise that you check for the source of water entry. 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. Please note that there was too much water present in the oil to perform an accurate viscosity test. We were unable to perform a particle count due to a high concentration of particles and water present in this sample.Gear wear is indicated. Appearance is hazy. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants and wear.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
WALKER GEARBOX 1 (S/N S531356)
Component
Lower Gearbox
Fluid
USPI GEAR 460 (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
Gear wear is indicated.

Contamination
There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample. Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition
The oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM30103**	USPM31101	---
Sample Date		Client Info		**22 Feb 2024**	22 Oct 2023	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**SEVERE**	SEVERE	---

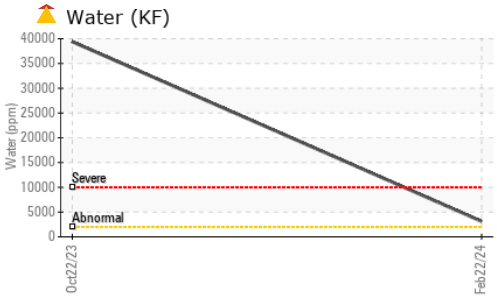
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**466**	1274	---
Chromium	ppm	ASTM D5185m	>15	**4**	9	---
Nickel	ppm	ASTM D5185m	>15	**4**	7	---
Titanium	ppm	ASTM D5185m		**<1**	<1	---
Silver	ppm	ASTM D5185m		**<1**	<1	---
Aluminum	ppm	ASTM D5185m	>25	**<1**	3	---
Lead	ppm	ASTM D5185m	>100	**<1**	0	---
Copper	ppm	ASTM D5185m	>200	**5**	19	---
Tin	ppm	ASTM D5185m	>25	**<1**	2	---
Vanadium	ppm	ASTM D5185m		**<1**	<1	---
Cadmium	ppm	ASTM D5185m		**<1**	<1	---

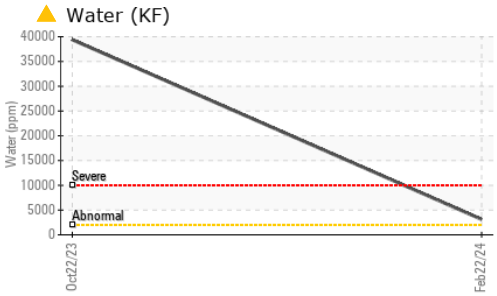
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**<1**	8	---
Barium	ppm	ASTM D5185m		**5**	0	---
Molybdenum	ppm	ASTM D5185m		**1**	0	---
Manganese	ppm	ASTM D5185m		**3**	8	---
Magnesium	ppm	ASTM D5185m		**4**	22	---
Calcium	ppm	ASTM D5185m		**28**	136	---
Phosphorus	ppm	ASTM D5185m		**148**	325	---
Zinc	ppm	ASTM D5185m		**5**	5	---
Sulfur	ppm	ASTM D5185m		**6827**	19121	---

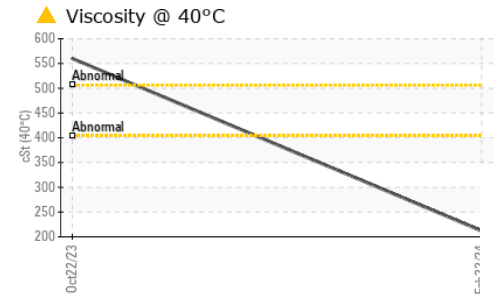
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**11**	30	---
Sodium	ppm	ASTM D5185m		**0**	1	---
Potassium	ppm	ASTM D5185m	>20	**4**	11	---
Water	%	ASTM D6304	>0.2	**0.312**	3.94	---
ppm Water	ppm	ASTM D6304	>2000	**3120**	39400	---

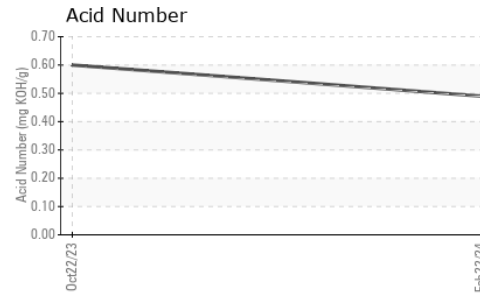
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.49**	0.60	---

OIL ANALYSIS REPORT







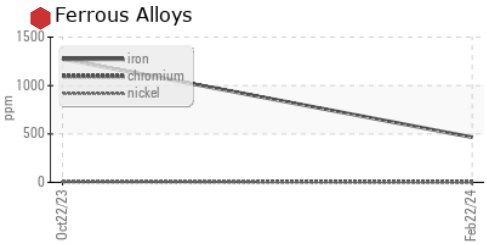


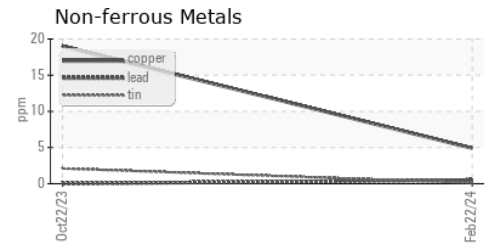
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Debris	scalar	*Visual	NONE	▲ **MODER**	▲ MODER	---
Sand/Dirt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

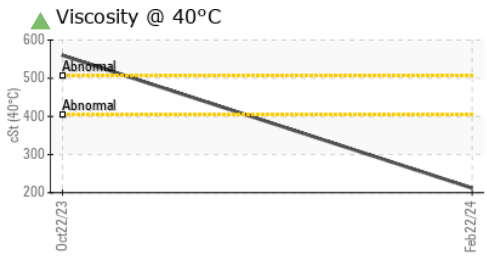
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		▲ **212**	560	---

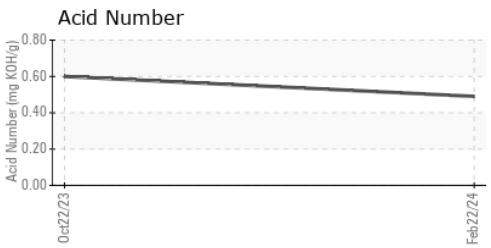
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM30103
Lab Number : 06098469
Unique Number : 10896699
Test Package : IND 2

Received : 23 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Doug Bogart

LAND O LAKES INC
1000 KRAFT DRIVE SE
MELROSE, MN
US
Contact: Service Manager

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: